ENSR
[illegible] Road, Seabrook Beach, Massachusetts [illegible]
T 508.888.3900 F 508.888.6888 www.ensr.aecom.com

October 25, 2007

Mr. Bill Hoey- District Conservationist
Hillsborough County Conservation District
Chappell Professional Center
468 Route 13 South
Milford, NH 03055

Re: Soil Hazards & Seeding Recommendations Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Pelham, NH

Dear Mr. Hoey:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to add a new compressor station in Pelham, New Hampshire, to increase the capacity of an existing Tennessee pipeline. The new compression would create an additional 30,000 dekatherms per day of capacity from Dracut, Massachusetts to Laconia, New Hampshire, to serve the growth needs of the KeySpan/Energy North distribution system. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to construct the new, 6,130 horse-power compressor station on Tennessee's existing system. The facility will be located on a ten-acre tract of land in Pelham primarily within an existing industrial park located off Industrial Park Road (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("FERC") Section 7C application and National Environmental Policy Act ("NEPA") review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to identify any concerns relative to soil compaction, severe erosion potential, poor revegetation potential, etc., within the subject property. Additionally, TGP would appreciate information regarding any specific seed-mix recommendations for restoring work areas disturbed during construction of the compressor station.

ENSR requests that the HCCD review its records relative to any of the above-referenced areas and provide written comments pertaining to the identified resources. Enclosed is a USGS topographic locus map showing the project locus for your review. Should you have any questions regarding this request or require any further information to complete your review, please do not hesitate to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration and assistance.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop – Tennessee
Shelley Jameson - Tennessee

Attachment - USGS topographic quadrangle locus map

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
The Concord Center
10 Ferry Street, Box 312, Suite 211
Concord, NH 03301-5081 (603) 223-6023 Fax: (603) 223-6030 www.nh.nrcs.usda.gov

November 8, 2007

John Zimmer, Senior Project Manager
ENSR
95 State Road
Sagamore Beach, MA 02562-2415

Mr. Zimmer,

Enclosed is a copy of NH NRCS Critical Area Planting Standard and Specification. It details seed mixtures for temporary and permanent vegetative cover along with fertilizer, mulch and lime recommendations. I have also enclosed a copy of the Hillsboro County Soil Survey. In it you will find detailed soils information and tables that provide information on erosion hazard, (table 6), revegetation potential (table 7 & 8), and other useful information that can be interpreted for the project you are working on. Please note that the information is not site specific and is intended for preliminary planning purposes. Onsite investigations are recommended as the site is located within an established industrial park where soil disturbance may have occurred. If NRCS can be of any further assistance, please contact our office at 223-6021 (Mike Lynch, District Conservationist, Merrimack, Belknap & Hillsborough Counties) or myself at 223-6022.

Sincerely,

William Hoey

William Hoey
Soil Conservationist

Cc; Mike Lynch, District Conservationist; Kerry Rickrode, HCCD Program Mgr.

Enclosure(s); Critical Area Planting Specification; Hillsboro County Soil Survey

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Durham, New Hampshire

STANDARD AND SPECIFICATION
for
CRITICAL AREA PLANTING (ACRE)

(Code 342)

Definition

Planting vegetation, such as trees, shrubs, vines, grasses, or legumes on highly erodible or critically eroding areas (does not include tree planting mainly for wood products).

Purpose

To stabilize the soil, reduce damage from sediment and runoff to downstream areas, and improve wildlife habitat, visual resources, and water quality.

Conditions where practice applies

On highly erodible or critically eroding areas. These areas usually cannot be stabilized by ordinary conservation treatment and management and, if left untreated, can cause severe erosion or sediment damage. Examples of applicable areas are dams, dikes, mine spoil, levees, waterways, cuts, fills, surface-mined areas, and denuded or gullied areas where vegetation is difficult to establish by usual planting methods.

SPECIFICATIONS

Treatment specifications are included for the following critical area situations:

1. Temporary seedings on sediment producing areas which will be exposed for a period up to 12 months.
2. Permanent seeding of grass and/or legume species on sediment producing areas.
3. Sod establishment on sediment producing areas.
4. Woody vegetation ground cover establishment on sediment producing areas.

SECTION 1: Temporary Seeding of Critical Area Subject to Erosion Which Will Be Exposed Up to 12 Months.

Design Criteria and Specifications

1. Site Preparation

   (a) Install needed surface water control measures prior to planting as feasible.

   (b) Where practical, grade to permit use of conventional equipment for seedbed preparation.

   (c) Provide adequate drainage where internal water movement, especially at toe of slopes, may cause seeps or slippage before seeding or ground cover is well established.

2. Seedbed Preparation

   (a) As practical, perform all cultural operations at right angles to the slope.

   (b) Provide the best conditions possible for seeding. The best soil textures are sandy loam, loam, and silt loam. Where sands or clays are encountered, consider modifying them with hauled-in materials. Replace topsoil after grading.

   (c) The seedbed immediately before seeding should be firm, but not so compact as to prohibit covering seed or root penetration. Use implements that will provide a minimum 3 to 4 inch depth of firm, but friable soil free from clods or stones, if feasible.

3. Lime and Fertilizer

   (a) Have soils tested where time permits and follow lime and fertilizer recommendations.

   (b) In lieu of soil test:

      1. Apply agricultural limestone at a rate of 1 ton per acre (50 lb./1000 sq. ft.) where experience shows that lime is necessary to attain satisfactory plant growth.

      2. Apply 10-10-10 analysis fertilizer at a minimum rate of 1000 lbs. per acre (23 lb./1000 sq. ft.), or equivalent where practical and when feasible.

      3. Work lime and or fertilizer into the soil to a depth of 2 to 3 inches, either before or during, final seedbed preparation where possible.

4. Plant Selection and Seeding Rates.

(a) Select adapted species from the following table:

TABLE 1

Seeding for Temporary Cover

Seed	Seeding Rates Lbs./Ac.	Lbs./1000 Sq. Ft.	Seeding Depth	Recommended Seeding Dates	Remarks
Winter Rye	112 (2 bu)	2.6	1-1 1/2"	8/15 - 9/5 for fall cover 8/15 - 10/1 for spring cover.	Good for fall seeding. Select a hardy variety.
Oats	80 (2 1/2 bu)	2.0	1-1 1/2"	4/1 - 7/1 8/15 - 9/15	Best for spring seeding. Early fall seedings will die when winter weather moves in, but the dead material will provide protection.
Annual Ryegrass	40	1.0	1/4"	4/1 - 6/1	Grows quickly but is of short duration. Use where appearance is important.
Sudangrass	40 (1.0 bu)	0.9	1/2-1"	5/15 - 8/15	Good growth during hot summer periods.
Perennial Ryegrass	30 (1.5 bu)	0.7	1/2"	4/1 - 6/1 8/15 - 9/15	Good cover, longer lasting than Annual Rye-Grass. Mulching will allow seeding throughout growing season.

(b) Apply seed uniformly at rates indicated in the aforementioned table by broadcasting, drilling, or hydroseeding.

5. Mulching
Mulch erosive and droughty areas immediately after or with seeding. See Mulching (484) Standard and Specifications for specific recommendations.

6. Conversion from Temporary to Permanent Vegetation
See Section 2 - Permanent seedings of grass and legume species on sediment producing areas, Section 3 - Sod establishment on sediment producing areas.

SECTION 2: Permanent Seedings of Grass and Legume Species on Sediment-Producing Areas

Design Criteria and Specifications

1. Site Preparation

(a) Install needed surface water control measures prior to planting permanent seeding.

(b) Where practical, grade to slopes that are 3:1 or flatter to permit use of conventional equipment.

(c) Provide adequate drainage where internal water movement, especially at toe of slopes, may cause seeps or slippage before seeding is well established.

2. Seedbed Preparation

(a) As practical, perform all cultural operations at right angles to the slope.

(b) Provide the best conditions possible for seeding. The best soil textures are sandy loam, loam, and silt loam. Where sands or clays are encountered, consider modifying them with hauled-in materials. Replace topsoil after grading.

(c) Where possible, the seedbed immediately before seeding, should be firm, but not so compact as to prohibit covering seed or root penetration. Tillage implements used shall provide a minimum 3-inch depth of firm, but friable soil free from clods or stones that are incompatible with seeding objectives.

3. Lime and Fertilizer

   (a) Where time permits, have soils tested and follow lime and fertilizer recommendations.

   (b) In lieu of soil tests:

      1. Apply ground limestone at a rate of 2 tons per acre. (100 lbs. per 1,000 sq. ft.).

      2. Apply 500 lbs. of 10-20-20 analysis fertilizer or equivalent per acre (11.5 lbs./1,000 sq. ft.).

      3. As practical, work lime and fertilizer into the soil to a depth of 2 to 3 inches, either before or during, final seedbed preparation.

4. Plant Selection and Seeding Rates

   (a) Select vegetative mixture from Table 2 for the purpose and management desired or use another mixture which experience has shown to be suitable.

   (b) Apply seed uniformly at rates indicated in Table 3 by broadcasting, drilling, or hydroseeding.

5. Mulching

   Mulching is an important step in establishing vegetation on critical areas. A mulch will help hold moisture, protect soil from erosion, hold seed in place, and keep soil temperatures relatively constant. See Mulching (484) Standard and Specifications for specific mulching recommendations.

6. Maintenance

   (a) Protect planted areas from damage by grazing, fire, traffic, and undesirable weed and woody growth as applicable.

   (b) Use visual inspections as a fertility needs assessment. If warranted, soil test every five years to determine lime and fertilizer needs.

TABLE 2
SEEDING FOR PERMANENT COVER*

Kind of Area	Seeding Mixture: Mowing	Seeding Mixture: No Mowing
Borrow Areas, Roadsides, Dikes, Levees, Pond Banks, and other Slopes and Banks		
A. Well to excessively drained	1,2,3,4,5, or 8	3,4,5,6,8,9,10, 11,12,13, or Table 4
4B. Somewhat poorly drained	2	5 or 6
C. Variable drainage	2	5 or 6
Drainage Ditch and Channel Banks		
A. Well to excessively drained	1,2,3, or 4	9,10,11
B. Somewhat poorly drained	2	
C. Variable drainage	2	
Diversions		
A. Well to excessively drained	2,3, or 4	9,10, or 11
B. Somewhat poorly drained	2	
C. Variable drainage	2	
Effluent Disposal		5 or 6
Gravel Pits	See NH Technical Note PM-NH-24	
Gullied and Eroded Areas		3,4,5,8,10,11
Mine spoil & Waste and Other Spoil Banks (If toxic substances and physical properties not limiting)		12,13,14
Shorelines (fluctuating water levels)		5 or 6
Sod Waterways and Spillways	1,2,3,4,6,7	1,2,3,4,6,7
General Recreation Seedings Picnic and Playgrounds or Driving and Archery Ranges	1,2,15,16, or 18	
Sand Dunes (blowing sand)		19

*For seeding woodland access road, skid trails, and landings, see Standard and Specifications (408) Forest Land Erosion Control System.

TABLE 3
SEED MIXTURES FOR PERMANENT SEEDINGS*

Mixture	Lbs./Acre	Lbs./1000 Sq. Ft.
1. Kentucky bluegrass	20	.45
Creeping red fescue	20	.45
Perennial ryegrass	5	.10
2. Creeping red fescue	20	.45
Redtop	2	.05
Tall fescue	20	.45
3. Creeping red fescue	20	.45
Birdsfoot trefoil 1/	8	.20
Tall fescue or smooth bromegrass	20	.45
4. Tall fescue	20	.45
Redtop	2	.05
Birdsfoot trefoil 1/	8	.20
5. Reed canarygrass	20	.45
Redtop	5	.10
6. Reed canarygrass	15	.35
Redtop	5	.10
Birdsfoot trefoil 1/	10	.25
7. Smooth bromegrass	15	.35
Perennial ryegrass	5	.10
Birdsfoot trefoil 1/	10	.25
8. Switchgrass (Broadcast)	10 (Pls) 2/	.25
9. Creeping red fescue	10	.25
Crownvetch or flatpea 1/	15 (30)	.35 (.70)
Tall fescue or smooth bromegrass	15	.35
Redtop	2	.05
10. Creeping red fescue	20	.45
Redtop	2	.05
Crownvetch or flatpea	15 (30)	.35 (.70)
11. Birdsfoot trefoil 1/	8	.20
Crownvetch 1/	15	.35
Creeping red fescue or tall fescue	20	.45

TABLE 3 (CONTINUED)

Mixture	Lbs./Acre	Lbs./1000 Sq. Ft.
12. Crownvetch or flatpea [1]	10 (30)	.25 (.70)
Perennial ryegrass	10	.25
13. Switchgrass	5 (PLS) [2]	.10
Bluestem (Big or Little)	5 (PLS) [2]	.10
Perennial ryegrass [1]	5	.10
Birdsfoot trefoil [1]	5	.10
14. Tall fescue	20	.45
Flatpea	30	.70
SHADY OR SUNNY SITES		
15. Creeping red fescue	50	1.15
Canada bluegrass or Kentucky bluegrass	50	1.15
16. Creeping red fescue	50	1.15
Tall fescue	30	.70
17. Creeping red fescue	20	.45
Flatpea [1]	30	.70
18. Tall fescue	150	3.50

DUNES

	Culms/Acre	Culms/1,000 sq. ft.
19. American beachgrass	20,000	460

[1] Inoculate legume seeds. Use four times recommended rate of inoculant when hydroseeding.

[2] (PLS) Pure Live Seed = $\frac{\text{\% germination x \% purity}}{100}$

*Relative amounts of individual species may vary within mixtures, somewhat, especially where species are available in commercial mixtures.

$$\frac{100 \times \text{lbs. of 100\% PLS required}}{\text{\% PLS of Commercial Seed Lot being used}} = \text{Actual lbs. of commercial seed to be used}$$

SECTION 3: Sod Establishment on Sediment-Producing Areas

Design Criteria and Specifications

1. Site Preparation

   (a) Install needed surface water control measures prior to laying sod.

   (b) Before laying sod, provide adequate subsurface drainage where internal water movement, especially at the toes of slopes, may cause seeps or soil slippage.

   (c) Grade slopes to 2:1 or flatter.

2. Seedbed Preparation

   (a) Provide good soil conditions for sodding. The desirable soil textures include sandy loam, loam, and silt loam. Where droughty or clayey soils are encountered, consider modifying them with additions of hauled-in materials. Replace topsoil after grading.

   (b) Fill areas must be compacted enough to prevent uneven settling. The entire surface to be sodded should be free from large clods, stones, or other debris. At this stage, incorporate lime and fertilizer uniformly into the surface soil as needed. Immediately before sodding, the soil should be loosened to a minimum depth of 4 inches and thoroughly dampened if not already moist. The last tillage operation should be performed across the slope whenever practical.

3. Lime and Fertilizer

   (a) If time permits, have soils tested and follow lime and fertilizer recommendations.

   (b) In lieu of a soil test:

      1. Apply 2 tons of ground limestone per acre. (100 lbs. per 1,000 sq. ft.).

      2. Apply 500 lbs. of 5-20-20 or equivalent fertilizer per acre. (11.5 lbs. per 1,000 sq. ft.).

      3. Lime and fertilizer should be worked into the top 3 to 4 inches of soil where feasible.

4. Sod Materials

(a) Sod quality: Sod should be good quality, free of weeds, disease and insects, and it should be of good color and density.

(b) Thickness of Cut: Sod should be machine cut at a uniform soil thickness necessary for plant viability during the Harvest-Transport-Installation cycle.

(c) Pad Size: Individual pieces of sod should be cut to the supplier's standard width and length. Maximum allowable deviation from standard widths and lengths shall be 5 percent.

(d) Strength of Sod Sections: Standard size sections of sod should be strong enough to support their own weight and retain their size and shape when suspended vertically from a firm grasp on the upper 10 percent of the section.

(e) Replacement: The policy for replacement of sod is dependent upon each individual sod farm. Most replacements extend only to the cost of the sod involved; not labor or transportation expenses. Notification of defective sod must be made within 24 hours of delivery. Failure to notify the sod farm within the specified time period can result in the farm's refusal to replace.

5. Installation

(a) Moistening the Soil: After all grading is completed, the soil should be irrigated within 12-24 hours prior to laying the sod. Sod should not be laid on soil that is dry and powdery.

(b) Starter Strip: The first row of sod should be laid in a straight line with subsequent rows placed parallel to and tightly against each other. Lateral joints should be staggered to promote more uniform growth and strength. Care should be exercised to ensure that the sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.

(c) Sloping Surfaces: On sloping areas where erosion may be a problem, sod should be laid with staggered joints and secured by pegging.

(d) Watering: The landscape contractor or agreed upon party should be responsible for watering sod immediately during and after installation to prevent drying. It should then be thoroughly irrigated to a depth sufficient that the underside of the new sod pad and soil immediately below the sod are thoroughly wet.

6. Acceptance: Acceptance of the installed sod should be on a daily basis within 14 hours of completion of an area or section unless otherwise specified.

7. Guarantee: The landscape contractor should guarantee work covered by this specification.

8. Maintenance:

(a) First week: In the absence of adequate rainfall, watering should be performed daily or as often as necessary and in sufficient quantities to maintain moist soil to a depth of at least 4 inches. Watering should be done during the heat of the day to help prevent wilting.

(b) Second and subsequent weeks: Water the sod as required to maintain adequate moisture in the upper 4 inches of soil. Avoid application of too much water. Sod should not be continually saturated; usually 20 to 30 minutes of sprinkler application is sufficient.

(c) Lime according to recommendations based on a soil test every five years.

(d) Fertilize with 60 pounds each of N, P_2O_5, and K_2O annually.

(e) Mow once or twice a year to reduce undesirable growth. Mow to minimum height of 1.5 to 2 inches.

SECTION 4: Establishing Ground Covers, Vines, Shrubs, and Trees on Critical Areas Subject to Erosion.

Ground covers, vines, shrubs, and trees may be utilized on many critical areas subject to erosion where a permanent, long-lived vegetative cover other than turf is desired.

A partial listing has been made of some plants known to be suitable for erosion control and possessing aesthetic value. See Table 4. This list is neither inclusive nor exclusive. It includes plants which establish easily on difficult sites as well as plants which will require some site improvements and special attention before they will grow satisfactorily.

These plants cannot be expected to provide an erosion control cover and prevent soil slippage on sites that are not stable due to soil texture and structure, water movement, or excessive slope.

Ground covers are not necessarily low-maintenance plants, although some of them are. In general, they are more difficult to establish than turf. Plants included in this list respond favorably to careful treatment during the period of establishment.

Planting Time

Early spring. This allows for the maximum root and top development to check erosion and allow the plant to become established before winter.

Soil Preparation

For short slopes, small areas, and mass plantings of close spacing, apply a commercial granular fertilizer, such as 5-10-10, and organic supplement such as composted cow manure, peat, or well-rotted sawdust, and work into soil prior to planting. Fertilizer rate--3 to 5 lbs. per 100 sq. ft. The organic material needed will depend upon the soil and plant being used. Plants such as pachysandra require a high rate of organic material, about a 2-inch layer worked into the root zone. Depending on the soil type and steepness of slope, the depth of soil tilling will vary from 4 to 6 inches.

For steep slopes and large area plantings, working up the entire planting area is impractical and will probably induce erosion. Center hole planting, a hole dug for each plant, is more desirable. If the soil on the slope is poorly suited to the species being planted, incorporate organic material into the planting hole. Whether organic material is needed or not, fertilize each plant at the rate of one ounce per plant of some complete fertilizer, such as 10-10-10. Mix fertilizer with soil below the roots of the plants.

An alternative is to add to the planting hole a sandy loam soil mixed with peat, composted cow manure, or well-rotted sawdust at a rate of 1:1 or 2:1.

The entire planted slope should be covered with a protective mulch, such as woodchips, or wood pulp fiber to conserve moisture and control erosion. Weeds should be controlled by pulling or other acceptable means. Where fresh woodchips, wood shavings, or sawdust are used as mulches or to add organic material to planting bed, a slow release fertilizer, such as 7-40-6, 30-0-0, or organic forms should be used.

Where erosion hazard is very high, heavy jute matting stapled to the slope will provide excellent erosion control, as will landscape mats of fiberglass.

Where individual plants are planted, a temporary cover crop of annuals may be used to provide ground cover until planted material offers a protective cover.

PLANTING

1. Planting of Trees

   (a) Refer to Tree Planting (612) Standard and Specifications and planting guides for planting specification and specie selection.

   Additional guidance for specific purpose plantings may be found in standards and specifications for Farmstead and Feedlot Windbreaks (308), Field Windbreaks (392), Field Borders (386), Wildlife Wetland Habitat Management (644), Wildlife Upland Habitat Management (645), and in the New Hampshire TECHNICAL NOTES.

   (b) Some tree species suitable for critical area planting can be found in Table 4.

2. Planting of Shrubs, Vines, and Ground Covers

   (a) A partial listing of shrubs and vines to consider to meet a variety of conditions can be found in Table 4.

   (b) Additional guidance concerning selection and planting may be found in standards and specifications for Field Borders (386), Wildlife Wetland Habitat Management (644), Wildlife Upland Habitat Management (645), Field Windbreaks (392), Farmstead and Field Windbreaks (380), and in the New Hampshire TECHNICAL NOTES.

Maintenance

Some watering, weeding, remulching, and fertilizing may be required of a new planting during the period of establishment. Cultivation is not recommended. This will encourage erosion and cause root injury.

If a controlled release fertilizer was used at time of planting, additional fertilizing will not be necessary for several years. Otherwise, fertilize plantings the spring of the second growing season and thereafter as needed.

TABLE 4

GUIDE TO TREES, SHRUBS, VINES, AND GROUND COVER FOR CRITICAL AREAS*

KIND OF AREA	SPECIES TO CONSIDER (NOT ALL INCLUSIVE)
Borrow areas, roadsides, banks, gullied and eroding areas, and other slopes	Ground covers, bittersweet, Virginia creeper, creeping juniper, viburnums, privets
Sandy or gravelly areas, including pits	Bristly locust, sweetfern, sumac, red pine, scotch pine, white pine, black alder, Norway spruce, tamarack, jack pine
Dunes and shifting sands	Bayberry, Virginia creeper, beach plum, rugosa rose, seashore juniper, jack pine, red pine
Streambanks and shorelines	Red osier dogwood, purpleosier willow, silky dogwood, bristly locust
Windbreaks and screens	Russian olive, white pine, redpine, arbor-vitae,red cedar, tall hedge, Austrian pine, white spruce, hybrid poplar, dogwoods, viburnums, honeysuckle

* This is a very general guide and specific details for particular species and situations should be obtained from other detailed sources.

ENSR
[illegible]

October 25, 2007

New Hampshire Natural Heritage Bureau Review
PO Box 1856
172 Pembroke Road
Concord, NH 03302-1856

Re: Rare Species Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Pelham, NH

Natural Heritage Bureau Review:

On behalf of Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Pipeline Group, ENSR is requesting information from the New Hampshire Natural Heritage Bureau ("NHB") regarding the potential presence of state-listed threatened and endangered species as well as any critical habitats known to occur along Tennessee's existing natural gas pipeline facilities in Pelham, New Hampshire. Please find attached a locus map depicting the area along the existing Tennessee system to be reviewed. In all cases ENSR will protect the confidential nature of any information received from NHB regarding the specific locations of threatened and endangered species.

If you have any questions or comments regarding the proposed project, please feel free to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee
Shelley Jameson - Tennessee

Attachments - USGS topographic quadrangle locus map
Rare Species Information Form

Memo

NH Natural Heritage Bureau

To: John Zimmer, ENSR
95 State Road
Sagamore Beach, MA 02562

From: Melissa Coppola, NH Natural Heritage Bureau
Date: 11/1/2007 9:50:01 AM (valid for one year from this date)
Re: Review by NH Natural Heritage Bureau
NHB File ID: NHB07-1764 Town: Pelham
Project type: Other: natural gas compressor station Location: Tax Maps: Tax lot 5-111
cc: Kim Tuttle

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

Comments: This site is within an area flagged for possible impacts on the state-listed *Alasmidonta varicosa* (brook floater) in the Beaver Brook. The closest documented mussel population is ca. 1.5 miles away.

Invertebrate Species	State[1]	Federal	Notes
Brook Floater (*Alasmidonta varicosa*)	E	--	Contact the NH Fish & Game Dept (see below).

[1]Codes: "E" = Endangered, "T" = Threatened, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

Contact for all animal reviews: Kim Tuttle, NH F&G, (603) 271-6544.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. For some purposes, including legal requirements for state wetland permits, the fact that no species of concern are known to be present is sufficient. However, an on-site survey would provide better information on what species and communities are indeed present.

Department of Resources and Economic Development
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

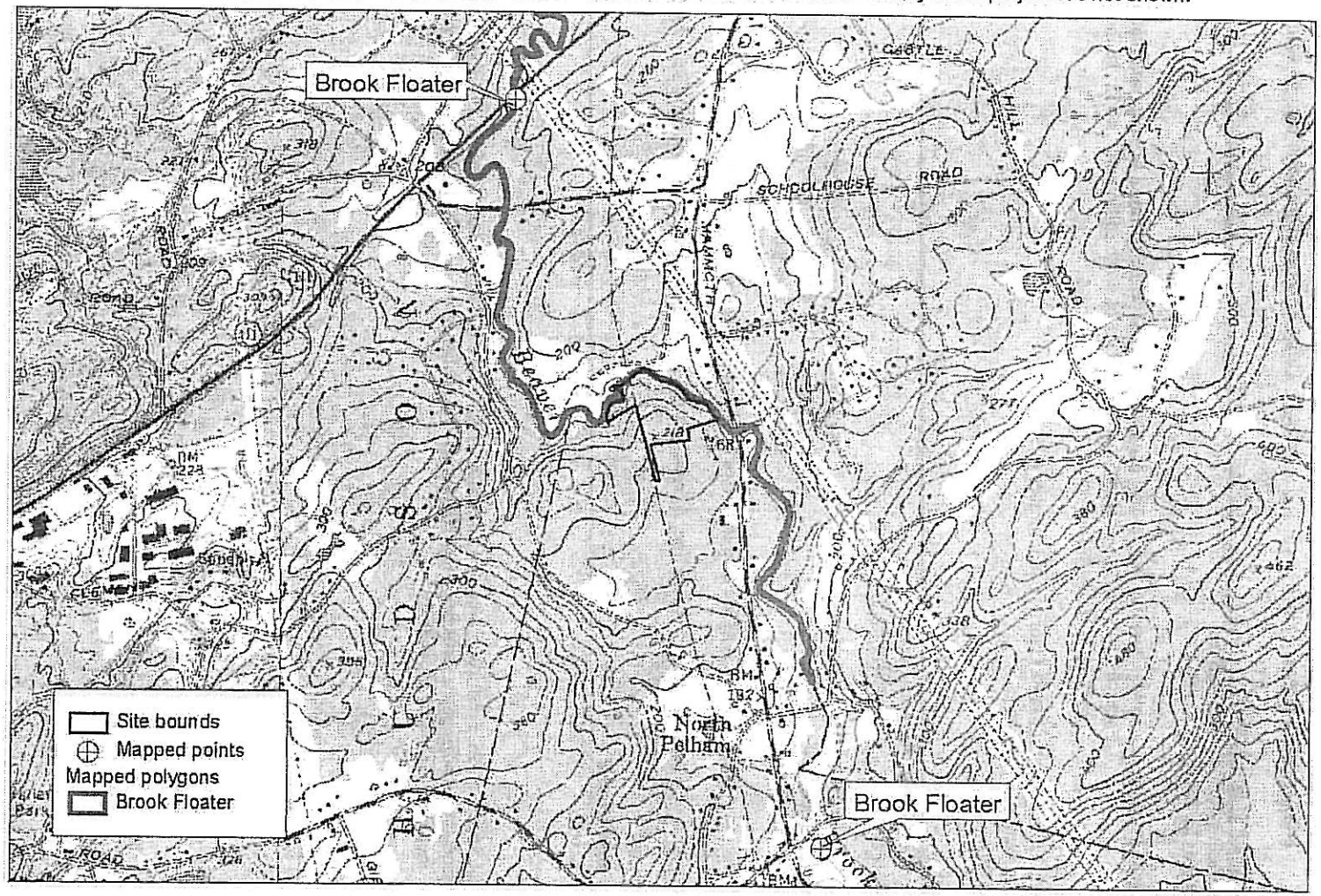
DRED/NHB
PO Box 1856
Concord NH 03302-1856

NHB07-1764

NH Natural Heritage Bureau

Known locations of rare species and exemplary natural communities

Note: Mapped locations are not always exact. Occurrences that are not in the vicinity of the project are not shown.



*Historical record

Valid for one year from this date: 01 Nov 2007

New Hampshire Natural Heritage Bureau - Animal Record

Brook Floater (*Alasmidonta varicosa*)

Legal Status

Federal: Not listed
State: Listed Endangered

Conservation Status

Global: Rare or uncommon
State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 1994: Ca. 6 live and several dead located upstream of Route 111 in approximately 1.5 hour search by one observer at site located "2.0 miles north of Pelham". 1952: 10 individuals taken by H.D. Athearn.

General Area:
General Comments: Marea Gabriel's site number 623.
Management Comments:

Location

Survey Site Name: Beaver Brook
Managed By: Beaver Brook Floodplain

County: Rockingham
Town(s): Londonderry
Size: 19.4 acres

USGS quad(s): Windham (4207173)
Lat, Long: 424738N, 0712150W
Elevation: 140 feet

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: Windham - Hudson town line. Access is at Route 111 crossing. Approximately 3.5 miles west of Cobbetts Pond.

Dates documented

First reported: 1952-07-14
Last reported: 1994

Gabriel, Marea. 1995. Freshwater mussel distribution in the rivers and streams of Cheshire, Hillsborough, Merrimack and Rockingham Counties, New Hampshire. Unpublished report to NH Department of Fish and Game. 61 pp. including maps and appendices.

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Brook Floater (*Alasmidonta varicosa*)

Legal Status

Federal: Not listed
State: Listed Endangered

Conservation Status

Global: Rare or uncommon
State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 2003: 1 age and sex unknown (Obs_id 750).
General Area: 2003: Freshwater - Stream or river (Obs_id 750).
General Comments: 2003: From Freshwater Mussel Survey. Tallant Road Bridge/Beaver Brook Pelham, NH survey done for SEA consultants, Inc by Oak Hill Environmental Services. Coordinates for location taken off of ArcView by A. Pyzikiewicz (Obs_id 750).
Management Comments:

Location

Survey Site Name: Beaver Brook, Tallant Road bridge
Managed By:

County: Hillsborough
Town(s): Pelham
Size: .4 acres

USGS quad(s): Windham (4207173)
Lat, Long: 424610N, 0712100W
Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2003: 225 ft downstream from Tallant Rd bridge crossing Beaver Brook (Obs_id 750).

Dates documented

First reported: 2003-10-17 Last reported: 2003-10-17

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

ENSR
[illegible] Road, Sagamore Beach, Massachusetts [illegible]
T 508.[illegible] F 508.[illegible] www.ensr.aecom.com

October 25, 2007

Chris Williams, Federal Consistency Coordinator
New Hampshire Coastal Program
Department of Environmental Services
PO Box 95
29 Hazen Drive
Concord, NH 03302

Re: Jurisdictional Determination Concurrence Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Pelham, NH

Dear Mr. Williams:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to add a new compressor station in Pelham, New Hampshire, to increase the capacity of an existing Tennessee pipeline. The new compression would create an additional 30,000 dekatherms per day of capacity from Dracut, Massachusetts to Laconia, New Hampshire, to serve the growth needs of the KeySpan/Energy North distribution system. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to construct the new, 6,130 horse-power compressor station on Tennessee's existing system. The facility will be located on a ten-acre tract of land in Pelham primarily within an existing industrial park located off Industrial Park Road (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("FERC") Section 7C application and National Environmental Policy Act ("NEPA") review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to identify whether the project is within the jurisdiction of the New Hampshire Coastal Program and subsequently requiring Federal Consistency Review under the Coastal Zone Management Act. Review of the "Coastal Zone" boundary map as shown on the Coastal Program website identifies the proposed Pelham Compressor Station site to be located outside the Coastal Boundary.

ENSR requests that the New Hampshire Coastal Zone Program provide a written concurrence with the above findings that the project location is outside of the Coastal Boundary and further provide a written determination regarding the New Hampshire Coastal Program's jurisdiction relative to the proposed project. Enclosed is a USGS topographic locus map showing the project locus for your review. If you have any questions or comments regarding the proposed project, please feel free to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration and assistance.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee
Shelley Jameson - Tennessee

Attachment - USGS topographic quadrangle locus map

Libby, Nicole

From: Williams, Chris [Christian.Williams@des.nh.gov]
Sent: Friday, January 11, 2008 1:39 PM
To: Libby, Nicole
Subject: RE: Jurisdictional Determination Concurrence Request

Hello Nicole,

Both Concord and Pelham are located outside of the New Hampshire coastal zone and the coastal watershed. As a result, the proposed Tennessee Gas Pipeline projects in these locations are not subject to Coastal Zone Management Federal Consistency review by the New Hampshire Coastal Program.

Should you have any further questions, please feel free to contact me.

Christian Williams
Federal Consistency Coordinator
NH Coastal Program
Pease Field Office
50 International Drive, Suite 200
Portsmouth, NH 03801
Phone: (603) 559-0025
Fax: (603) 559-1510

-----Original Message-----
From: Libby, Nicole [mailto:nlibby@ensr.aecom.com]
Sent: Wednesday, January 09, 2008 10:11 AM
To: Williams, Chris
Subject: Jurisdictional Determination Concurrence Request

Mr. Williams,

I am writing in regards to a natural gas Project for Tennessee Gas Pipeline Company proposed in Pelham and Concord, NH.

The Project involves construction of a compressor station in Pelham and modification to an existing meter station in Concord. I had previously sent a letter requesting concurrence on the coastal zone jurisdiction for the Project in October, 2007. Review of the coastal Zone boundary maps as shown on the coastal zone program website identifies the Project locations outside of the Coastal Boundary. Would you mind taking a quick look at the attached Project locus maps, and let me know if you concur with this finding?

Thank you for your time,

Nicole Libby

Nicole Libby
Project Specialist

ENSR
95 State Road
Sagamore Beach, MA 02562-2415
Office (508) 888-3900 ext. 228
Fax (508) 888-6689
Cell (508) 944-2102

ENSR
[illegible] State Road, Sagamore Beach, Massachusetts [illegible]
T 508.[illegible] F 508.[illegible] www.ensr.aecom.com

October 25, 2007

Scott Decker- Program Supervisor
New Hampshire Fish and Game
Inland Fisheries Division
11 Hazen Drive
Concord, NH 03301

Re: Fisheries Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Pelham, NH

Dear Mr. Kanter:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to add a new compressor station in Pelham, New Hampshire, to increase the capacity of an existing Tennessee pipeline. The new compression would create an additional 30,000 dekatherms per day of capacity from Dracut, Massachusetts to Laconia, New Hampshire, to serve the growth needs of the KeySpan/Energy North distribution system. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to construct the new, 6,130 horse-power compressor station on Tennessee's existing system. The facility will be located on a ten-acre tract of land in Pelham primarily within an existing industrial park located off Industrial Park Road (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("Commission") Section 7C application and review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to identify the fishery type of each surface waterbody that may be crossed by the proposed project, including fisheries of special concern.

ENSR requests that the New Hampshire Department of Fish and Game conduct a preliminary review of the proposed compressor station, which is located adjacent to Beaver Brook. This review should identify the fishery types (coldwater vs. warm water) of the surface waterbody and whether or not fisheries of special concern occur within the project location. Enclosed is a USGS topographic locus map showing the project locus for your review. If you have any questions or comments regarding the proposed project, please feel free to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration and assistance.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee
Shelley Jameson - Tennessee

Attachments - USGS Topographic quadrangle locus map

New Hampshire
Fish and Game Department

11 Hazen Drive, Concord, NH 03301-6500
Headquarters: (603) 271-3421
Web site: www.WildNH.com

TDD Access: Relay NH 1-800-735-2964
FAX (603) 271-1438
E-mail: info@wildlife.nh.gov

Donald S. Clarke,
Acting Executive
Director

November 9, 2007

John Zimmer
Senior Project Manager
ENSR
95 State Road
Sagamore Beach, MA 02562-2415

Re: Tennessee Gas Pipeline Project
Pelham NH

Dear Mr. Zimmer:

Thank you for the opportunity to comment on this project with respect to fisheries concerns. I conducted a site visit to the proposed location of the compressor station on 11/8/2007. The location is near a reach of Beaver Brook in the town of Pelham. At this site, Beaver Brook is a low-gradient stream approximately 20-50 feet wide. Bottom substrates observed are predominately sand and organic material. Several small beaver dams were also observed in the reach. While the fish community in the stream was not sampled during my visit, past sampling records of Beaver Brook in the vicinity of the site indicate a primarily warmwater fisheries community (bass, sunfish, bullheads, minnows). Two fish species of "conservation concern" found in Beaver Brook in past sampling efforts include redfin pickerel (*Esox americanus americanus*) and American eel (*Anguilla rostrata*). I should also mention that Beaver Brook is stocked with a mixture of brook, brown, and rainbow trout in the early spring to provide a seasonal coldwater fishery.

Should you have any further questions, do not hesitate to contact me at (603)271-2491 or scott.r.decker@wildlife.nh.gov

Sincerely,

Scott R. Decker
Inland Fisheries Program Supervisor

ENSR
[illegible] Road, Sagamore Beach, Massachusetts [illegible]
T 508.[illegible] F 508.[illegible] www.ensr.aecom.com

October 25, 2007

George M. Bald, Commissioner
Division of Parks and Recreation
New Hampshire Department of Resources and Economic Development
PO Box 1856
Concord, NH 03302-1856

Re: Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Pelham, NH

Dear Commissioner Bald:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to add a new compressor station in Pelham, New Hampshire, to increase the capacity of an existing Tennessee pipeline. The new compression would create an additional 30,000 dekatherms per day of capacity from Dracut, Massachusetts to Laconia, New Hampshire, to serve the growth needs of the KeySpan/Energy North distribution system. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to construct the new, 6,130 horse-power compressor station on Tennessee's existing system. The facility will be located on a ten-acre tract of land in Pelham primarily within an existing industrial park located off Industrial Park Road (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("FERC") Section 7C application and National Environmental Policy Act ("NEPA") review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to determine whether the project will directly cross or be located within 0.25 miles of any sensitive area listed below:

- State designated wild or scenic rivers;
- Lands administered by state agencies;
- State-designated natural, recreational, scenic areas;
- State-designated or administered natural landmarks or visually-sensitive areas

ENSR requests that the New Hampshire Department of Resources and Economic Development review its records relating to any of the above-referenced areas and provide written comments pertaining to the identified resources. Enclosed is a USGS topographic locus map showing the project locus for your review. Should you have any questions regarding this request or require any further information to

complete your review, please do not hesitate to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration and assistance.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee
Shelley Jameson - Tennessee

Attachment - USGS topographic quadrangle locus map

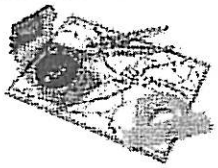
Libby, Nicole

From: Ron Duddy [rduddy@dred.state.nh.us]
Sent: Tuesday, January 15, 2008 9:52 AM
To: Libby, Nicole
Subject: RE: Concord Expansion Project Information Request
Attachments: AB+F.sbn; AB+F.sbx; PWW.dbf; PWW.shp; PWW.shx; PWW.sbn; PWW.sbx; AB+F.dbf; AB+F.shp; AB+F.shx

Hi Nicole:
Here are the two shapefiles requested. The PWW (Pembroke Water Works) property seems to fall within the ¼ radius area. The AB+F (Airport Bluff and Flodplain) property seems to fall just outside. Again, these property locations are general, but are from Granit and are probably pretty close.

Hope this helps!

Ron Duddy
Surveyor/Mapper
State of NH-DRED



-----Original Message-----
From: Libby, Nicole [mailto:nlibby@ensr.aecom.com]
Sent: Tuesday, January 15, 2008 8:55 AM
To: Ron Duddy
Cc: Zimmer, John; Buynevich, Artem
Subject: FW: Concord Expansion Project Information Request

Ron,

Thank you for speaking with me over the phone this morning. If possible, could you send me the shapefile with the Pembroke Water Works and Airport Bluff and Flood Plain lands depicted?

Thank you for your time,

Nicole Libby
Project Specialist

ENSR
95 State Road
Sagamore Beach, MA 02562-2415
Office (508) 888-3900 ext. 228
Fax (508) 888-6689
Cell (508) 944-2102

Libby, Nicole

From: Bill Carpenter [bcarpenter@dred.state.nh.us]
Sent: Tuesday, January 15, 2008 8:00 AM
To: Libby, Nicole
Cc: Linda Corriveau
Subject: FW: Concord Expansion Project Information Request
Attachments: NHB07-1764_Zimmer.pdf; NHB07-2086_Zimmer.pdf

Nicole

While none of us seem to remember, nor can we locate, the October ENSR letter regarding a gasline project though NH, pertinenet staff have recently reviewed the project proposal and find no impact to this agency's lands, or to NH rare plants/communities (see e-mail responses below).

I hope this helps...please contact me with any further questions.

Bill

-----Original Message-----
From: Melissa L. Coppola
Sent: Monday, January 14, 2008 9:31 AM
To: Ron Duddy; Bill Carpenter
Subject: RE: Concord Expansion Project Information Request

Ron and Bill,
I reviewed the two sites for these projects for ENSR back in November and December. There were some concerns for nearby wildlife and ENSR was directed to contact Fish and Game about these potential impacts. We have no records of rare plants or exemplary natural communities within the footprint of project impacts as outlined by ENSR. I am attaching the two files that were sent to ENSR.

Best,
Melissa

Melissa L. Coppola
Environmental Information Specialist
DRED-Natural Heritage Bureau
PO Box 1856
Concord, NH 03302-1856
603-271-2215 ext. 323

-----Original Message-----
From: Ron Duddy
Sent: Wednesday, January 09, 2008 2:10 PM
To: Melissa L. Coppola; Bill Carpenter
Subject: FW: Concord Expansion Project Information Request

Melissa: I gave a quick review and added the ¼ mile protective radius (see shapefile). The Pembroke

Water Works and Airport Bluff and Flood Plain lands fall within the radius, but no DRED land. Didn't know if you wanted to check for protected flora/fauna and let Bill Carpenter know if you have any concerns. Otherwise, it looks good relative to DRED properties.

Ron Duddy
Surveyor/Mapper
State of NH-DRED

-----Original Message-----
From: Bill Carpenter
Sent: Wednesday, January 09, 2008 1:15 PM
To: Ron Duddy
Cc: Linda Corriveau
Subject: FW: Concord Expansion Project Information Request

Ron

I'm tied up with legislative stuff the rest of today..please, you and/or OJ, review the attachments in order to identify any the concerns, and report back to me. I do not recall seeing any plans/letters regarding this matter.

Thanks..Bill

-----Original Message-----
From: Linda Corriveau
Sent: Wednesday, January 09, 2008 12:11 PM
To: Bill Carpenter
Cc: Denise LaFrazia; 'nlibby@ensr.aecom.com'
Subject: FW: Concord Expansion Project Information Request

Bill, please review the emails below with the following attachments.. This expansion project might involve some DRED properties. Unfortunately, this office in not familiar with this request that was sent in October, therefore, Tennessee Gas Pipeline is requesting a quick turn around. As Land Agent, have you seen the request and what can we do to assist?

-----Original Message-----
From: Denise LaFrazia
Sent: Wednesday, January 09, 2008 11:54 AM
To: Linda Corriveau
Subject: FW: Concord Expansion Project Information Request

Linda, I received a phone call and then this email from Nicole Libby (see attachments). She would like a reply to her request letter to Commissioner Bald dated 10-25-07.
If I can help, let me know.

Denise D. LaFrazia
Administrative Secretary
Planning and Development

State of New Hampshire
Department of Resources and Economic Development
Division of Parks and Recreation
P.O. Box 1856
Concord, NH 03302-1856
603-271-2606
603-271-2629-fax
dlafrazia@dred.state.nh.us

-----Original Message-----
From: Libby, Nicole [mailto:nlibby@ensr.aecom.com]
Sent: Wednesday, January 09, 2008 11:15 AM
To: Denise LaFrazia
Subject: Concord Expansion Project Information Request

In regards to our phone conversation this morning, attached are Project location maps for the Tennessee Gas Pipeline Company, Concord Expansion Project. I have also attached the letter sent by ENSR on behalf of Tennessee Gas, requesting information in regards to state lands in the vicinity of the Project.

The Project includes construction of a compressor station in Pelham, NH and modifications to an existing meter station in Concord, NH.

Please let me know if you have any questions or if you have any difficulty opening the attachments. Any information you could provide would be appreciated.

Thank you for your time,

Nicole Libby
Project Specialist

ENSR
95 State Road
Sagamore Beach, MA 02562-2415
Office (508) 888-3900 ext. 228
Fax (508) 888-6689
Cell (508) 944-2102

ENSR
55 State Road, Sagamore Beach, Massachusetts 02562-2115
T 508.888.3900 F 508.888.0069 www.ensr.aecom.com

October 25, 2007

David Wunsch
New Hampshire State Geologist
New Hampshire Department of Environmental Services
29 Hazen Drive
PO Box 95
Concord, NH 03301

Re: Geologic Hazard Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Pelham, NH

Dear Mr. Wunsch:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to add a new compressor station in Pelham, New Hampshire, to increase the capacity of an existing Tennessee pipeline. The new compression would create an additional 30,000 dekatherms per day of capacity from Dracut, Massachusetts to Laconia, New Hampshire, to serve the growth needs of the KeySpan/Energy North distribution system. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to construct the new, 6,130 horse-power compressor station on Tennessee's existing system. The facility will be located on a ten-acre tract of land in Pelham primarily within an existing industrial park located off Industrial Park Road (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("FERC") Section 7C application and National Environmental Policy Act ("NEPA") review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to identify the presence or potential for geologic hazards or resources along or within 0.25 miles of TGP's new aboveground compressor station to be located in Pelham, New Hampshire, including:

- presence or potential for paleontological resources;
- potential earthquake hazards or active faults in the project vicinity;
- areas susceptible to soil liquefaction and/or landsliding;
- potential for slumping or ground subsidence due to karst terrain or underground mining;

- areas susceptible to flash flooding or volcanism; and
- any known existing or potential mineral mining resources.

ENSR is requesting a written response from the New Hampshire State Geologist regarding any of the above-mentioned geologic hazards or resources located within the general area. Please find enclosed a USGS topographic locus map showing the project locus for your review. Should you have any questions regarding this request or require any further information to complete your review, please do not hesitate to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration and assistance.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee
Shelley Jameson - Tennessee

Attachment - USGS topographic quadrangle locus map

Libby, Nicole

From: Wunsch, David [David.Wunsch@des.nh.gov]
Sent: Wednesday, January 09, 2008 2:14 PM
To: Libby, Nicole
Cc: Zimmer, John; Kastning, Ernst H
Subject: Tenn Pipeline Info request
Attachments: Tenn Gas Pipeline Info Request ENSR.pdf; TxPipeline_Ltr.doc; Seismic Risk Map of Western New England.doc

Ms. Libby
Mr. Zimmerman:

Please find attached three files that contact the package we have put together per your request letter for geologic/geologic hazard Information regarding the proposed Pelham site for your project. I will follow up with a hardcopy through the U.S. Mail today as well.

I am also in receipt of your request sent by email regarding a second site in Concord. We will compile the information that is available for that site and send the results to you as well. I have cc'd Dr. Ernst Kastning of my staff who was a principal in compiling this information. Feel free to contact either one of us if you have any questions.

Best regards,

David Wunsch

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

David R. Wunsch, Ph.D., P.G.
State Geologist and Director
New Hampshire Geological Survey
NH Department of Environmental Services
29 Hazen Drive, PO Box 95
Concord, New Hampshire 03301
Office: (603)-271-6482 Fax: (603)-271-3305
Email: dwunsch@des.state.nh.us
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Libby, Nicole

From: Libby, Nicole
Sent: Wednesday, January 09, 2008 10:29 AM
To: 'david.wunsch@des.nh.gov'
Cc: Zimmer, John
Subject: Tennessee Concord Expansion Project
Attachments: Fig_1_2b_Site_Location_Laconia_Meter_Station.pdf; 10-25-07 request.PDF

David,

Per our phone conversation this morning, that would be great if you could provide the geology information in electronic format. In addition, I have attached a site map of the existing Laconia Meter Station in Concord, NH. The Project would involve modifications to the existing meter station. Any similar information you could provide in regards to this location would be appreciated.

Thank you for your time,

Nicole Libby
Project Specialist

ENSR
95 State Road
Sagamore Beach, MA 02562-2415
Office (508) 888-3900 ext. 228
Fax (508) 888-6689
Cell (508) 944-2102

January 9, 2008

John Zimmer
Senior Project Engineer
ENSR Corporation
95 State Road
Sagamore Beach, MA 02562-2415

Re: **Geologic Hazard Information Request**
Tennessee gas Pipeline Company
Concord Expansion Project
North Pelham, Hillsborough and Rockingham Counties, New Hampshire

Dear Mr. Zimmer:

Please find attached a response to your letter of October 25, 2007, regarding information on the presence or potential for geologic hazards at the proposed site in the northern part of the Town of Pelham, New Hampshire, approximately 0.75 mile north-northeast of North Pelham and about 1200 feet west of Route 128. NHGS staff reviewed our files, maps, publications, and databases to provide you with the accompanying information.

The New Hampshire Geological Survey is pleased to provide you this information, which is consistent with our mission of providing scientific and technical information for sound decision-making. We hope that this information is useful in your planning phase. Please let me know if we can be of further assistance.

Sincerely,

David R. Wunsch, Ph.D., P.G.
State Geologist and Director
NH Geological Survey

Ernst H. Kastning, Ph.D., P.G.
Surficial Mapping Program Manager

Re: **Geologic Hazard Information Request**
Tennessee gas Pipeline Company
Concord Expansion Project
North Pelham, Hillsborough and Rockingham Counties, New Hampshire

Presence or potential for paleontological resources.

The property is underlain by the Eliot Formation (Silurian in age), a granulite metamorphic unit within the garnet zone of the Merrimack Group (Sriramadas, 1966). The strike of the bedding (metamorphic foliation) is approximately N45W and the beds dip 70-80 degrees to the northwest. As is true for most of New Hampshire, this bedrock unit is crystalline and metamorphosed, it will not have paleontological content.

The only other potential source of paleontologic material in New Hampshire may exist in peat bogs. The 1:24,000-scale surficial geologic map of the area (Larson, 1984) does not indicate the presence of such deposits within one mile of the site.

Potential earthquake hazards or active faults in the project vicinity.

There are no mapped faults within several miles of the site (Sriramadas, 1996). Records of earthquakes available from the Weston Geophysical Observatory of Boston College indicate that two nearest low-magnitude earthquakes within the last 15 years occurred as follows. One centered about three miles north-northeast of the site in the Town of Londonderry, New Hampshire (magnitude 2.3 on February 6, 1996) and the other centered about 7.6 miles to the south-southwest in West Chelmsford, Massachusetts (magnitude 1.9 on July 28, 1993). Based on seismic-risk analysis, there is approximately a 12-percent probability that a magnitude 4.75 or greater earthquake would occur within 50 miles of the site over the next 100 years (Figure 1 attached).

Areas susceptible to soil liquefaction and/or landsliding

Ground motion during an earthquake and/or over-wetting of surficial materials through precipitation or snow melt may cause liquefaction of clay-rich units. Varved glacial-lake deposits are particularly susceptible to these conditions. There are glacial lake-bottom deposits consisting of silt and sand just to the north of the North Pelham site (Larson, 1984); however, excessively clay-rich deposits do not appear to be located on or near the site. Landslides of clay-rich units may occur, especially in areas of steep slopes. The steepest topographic slopes in the vicinity of the site are about 1500 feet due west of the property. These slopes are no greater than 17 feet per 100 feet or 9.7 degrees. The slope at the site leading north down Beaver brook is about the same (9.7 degrees). The site is almost entirely underlain by glacial till (Larson, 1984). Till contains a large fraction of clay and this may pose a slide problem if construction is too close to the top of the slope or on the slope.

Potential for slumping or ground subsidence due to karst terrane or underground mining

True karst (features developed principally through dissolution of rock) is extremely rare in New Hampshire. Thus slumping or subsidence of the ground as a result of karst is not an issue for this site.

Other openings such as mines (active or abandoned) can potentially affect on ground instability on the surface. This is rather uncommon in areas of mining, but it can occur locally. The data that we have on mines in New Hampshire (Meyers and Stewart, 1956) indicates that historically there has been little or no mining or rock quarrying in the area. The nearest known abandoned quarry is over seven miles to the west-southwest of the property, in Nashua (Sriramadas, 1966). There are several gravel pits in the southwestern part of the Windham Quadrangle. However, the closest ones are a mile or more from the North Pelham site (Larson, 1984) and would not pose a problem for site development.

Areas susceptible to flash flooding or volcanism

Flash flooding is always a concern along streams in New Hampshire. Alluvium (Holocene in age) occurs along Beaver Brook which flows through the northeastern part of the property (Larson, 1984). This indicates that this reach of the stream has experienced periodic flooding in the past and will continue to do so from time to time.

Most of the planned site lies about 40 to 60 feet above the alluvial deposits of Beaver Brook and thus this amount above the active floodplain. The northeasternmost area of the property is only 10 to 20 feet above the floodplain. The latter may be of concern should construction occur in that section of the property.

New Hampshire is volcanically inactive, so volcanic hazards are not an issue.

Any known existing or potential mineral mining resources

As mentioned above, we have no historical information on mining or quarrying of bedrock in the immediate vicinity of the North Pelham site. It is unlikely that the area will be of commercial mining interest in the foreseeable future. On the other hand, sand-and-gravel resources exist within the northeastern part of the site (Larson, 1984). Quaternary alluvium along Beaver Brook, which flows through the property, is a potential source of aggregate. As with many alluvial deposits in New Hampshire, this material may serve as a local ground water aquifer.

Extenuating circumstances

Specific information regarding the nature and position of the proposed structures or site-development plans were not included in the request for information. Some hazards, particularly those of land stability (liquefaction, landsliding) and flooding, may be of concern should the structures be installed too close to Beaver Brook.

References cited

Larson, Grahame J., 1984, Surficial geologic map of the Windham Quadrangle, Rockingham and Hillsborough Counties, New Hampshire: *New Hampshire Department of Resources and Economic Development, Map SGS 2*, 1 sheet, scale = 1:24,000. (map available as publication Geo-88 from NH Department of Environmental Services http://www.des.nh.gov/asp/Geology/links.asp?theLink=9)

Meyers, T.R. and Stewart, Glenn W., 1956 (fifth printing, 1977), The Geology of New Hampshire: Part III – Minerals and Mines: *New Hampshire Department of Resources*

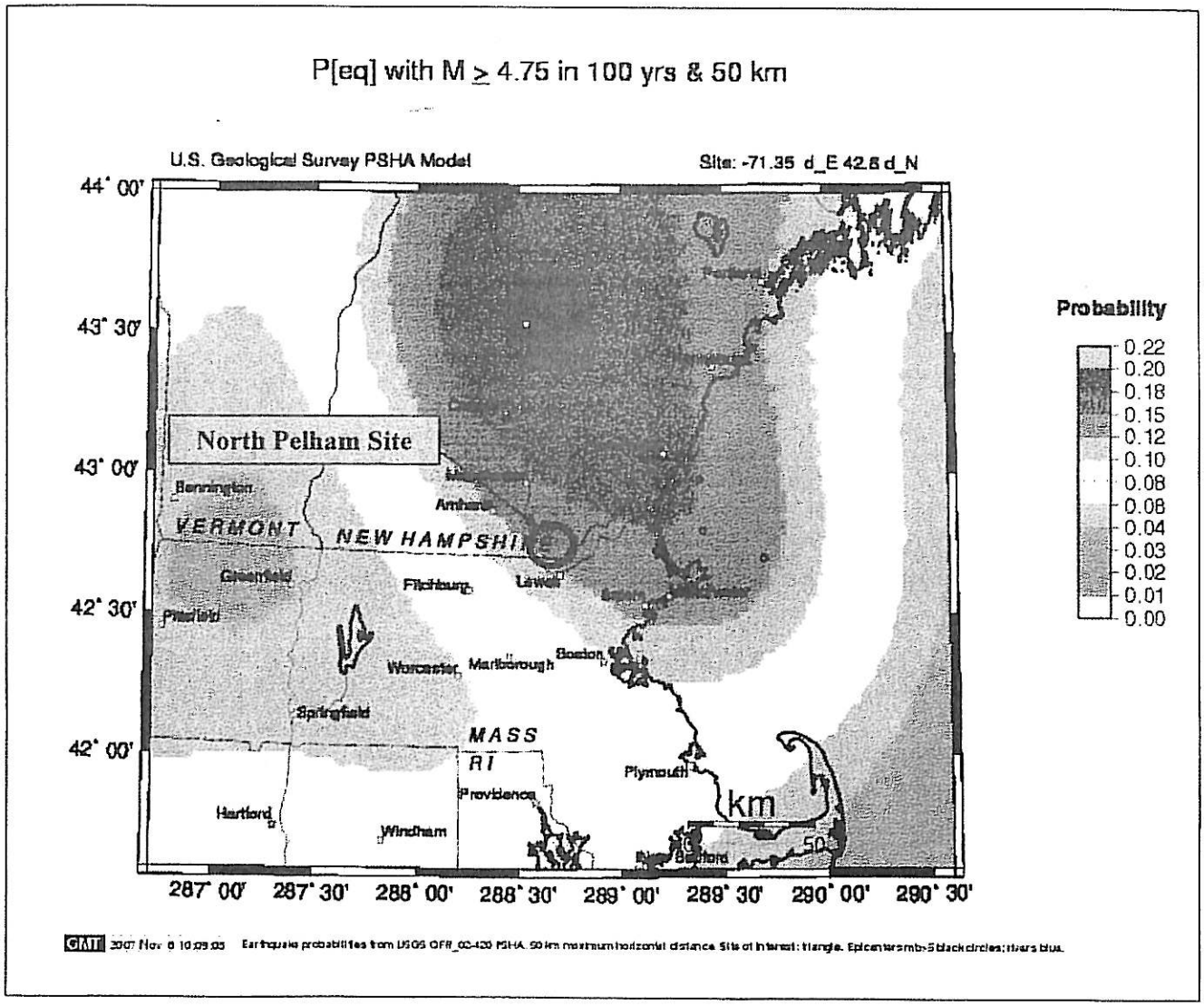
and Economic Development, Division of Forest and Lands, 105 p. plus map showing mines. (Text available on line: http://www.des.nh.bov/pdf/GeologyofNH.pdf)

Sriramadas, Aluru, 1966, Geologic map and structure sections of the Manchester Quadrangle, New Hampshire: *New Hampshire Department of Resources and Economic Development, Bulletin No. 2,* including map sheet, scale 1:62,500. (map available as publication Geo-61 from NH Department of Environmenal Services: http://www.des.nh.gov/asp/Geology/links.asp?theLink=9)

Figure 1

Seismic Risk in Western New England

Map showing probability of magnitude 4.75 or greater earthquake in 100 years



Compiled 6 November 2007 by Ernst H. Kastning
New Hampshire Geological Survey
Source: U.S. Geological Survey http://www.usgs.gov

ENSR
95 State Road, Sagamore Beach, Massachusetts 02562-2418
T 508.888.3900 F 508.888.8808 www.ensr.aecom.com

October 25, 2007

Pierce Rigrod- Technical Assistance
Drinking Water Source Protection Program
Drinking Water and Groundwater Bureau
New Hampshire Department of Environmental Services
29 Hazen Drive
PO Box 95
Concord, NH 03302

Re: Aquifer Protection Area Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Pelham, NH

Dear Mr. Rigrod:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to add a new compressor station in Pelham, New Hampshire, to increase the capacity of an existing Tennessee pipeline. The new compression would create an additional 30,000 dekatherms per day of capacity from Dracut, Massachusetts to Laconia, New Hampshire, to serve the growth needs of the KeySpan/Energy North distribution system. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to construct the new, 6,130 horse-power compressor station on Tennessee's existing system. The facility will be located on a ten-acre tract of land in Pelham primarily within an existing industrial park located off Industrial Park Road (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("FERC") Section 7C application and National Environmental Policy Act ("NEPA") review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to identify the presence of any Aquifer Protection Areas crossed by or within 0.25 miles of TGP's proposed compressor station facility site in Pelham, New Hampshire, including the presence of any known private, public, community, or municipal drinking water supply wells and springs within 300 feet of the proposed compressor station facility.

ENSR requests that the Drinking Water Source Protection Program review their records relative to any of the above-referenced areas and provide written comments pertaining to the identified resources. Enclosed is a USGS topographic locus map showing the project locus for your review. Should you have any questions regarding this request or require any further information to complete your review, please do not hesitate to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration and assistance.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee
Shelley Jameson - Tennessee

Attachment - USGS topographic quadrangle locus map

ENSR
[illegible] State Road, Sagamore Beach, Massachusetts 02562-2413
T 508.888.3900 F 508.888.6689 www.ensr.aecom.com

October 24, 2007

John Kanter – Program Supervisor
New Hampshire Fish and Game
Non-Game / Endangered Species Program
11 Hazen Drive
Concord, NH 03301-5087

Re: Rare Species Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Pelham, NH

Dear Mr. Kanter:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to add a new compressor station in Pelham, New Hampshire, to increase the capacity of an existing Tennessee pipeline. The new compression would create an additional 30,000 dekatherms per day of capacity from Dracut, Massachusetts to Laconia, New Hampshire, to serve the growth needs of the KeySpan/Energy North distribution system. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to construct the new, 6,130 horse-power compressor station on Tennessee's existing system. The facility will be located on a ten-acre tract of land in Pelham primarily within an existing industrial park located off Industrial Park Road (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("FERC") Section 7C application and National Environmental Policy Act ("NEPA") review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to identify the presence of any federally listed threatened or endangered species on or within 0.25-miles of the proposed aboveground compressor station to be located in Pelham, New Hampshire.

ENSR requests that the New Hampshire Fish and Game Department ("NHFG") review its records relative to threatened and endangered species and provide written comments pertaining to the identified resources. Please find enclosed a USGS topographic locus map showing the project locus for your review. In all cases, ENSR will protect the confidential nature of any information received from the NHFG regarding the specific locations of threatened and endangered species. If you have any questions or comments regarding the proposed project, please feel free to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration and assistance.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee
Shelley Jameson - Tennessee

Attachment – USGS topographic quadrangle locus map

ENSR
[illegible]

October 25, 2007

Marlene Demers- Health Officer
Pelham Board of Health
6 Village Green
Pelham, NH 03076

Re: Public and Private Drinking Water Wells Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Pelham, NH

Dear Ms. Demers:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to add a new compressor station in Pelham, New Hampshire, to increase the capacity of an existing Tennessee pipeline. The new compression would create an additional 30,000 dekatherms per day of capacity from Dracut, Massachusetts to Laconia, New Hampshire, to serve the growth needs of the KeySpan/Energy North distribution system. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to construct the new, 6,130 horse-power compressor station on Tennessee's existing system. The facility will be located on a ten-acre tract of land in Pelham primarily within an existing industrial park located off Industrial Park Road (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("FERC") Section 7C application and National Environmental Policy Act ("NEPA") review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to identify the presence of any known active or inactive public, private, or community drinking water wells on or within 300 feet of the proposed aboveground compressor station to be located in Pelham, New Hampshire. In addition, please identify any surface water used for public drinking water supplies, surface water protection districts, or public drinking water supply watershed areas on or within 0.25-miles of the proposed compressor facility site.

ENSR requests that the Town of Pelham Board of Health review their records relative to any of the above-referenced areas and provide written comments pertaining to the identified resources. Enclosed is a USGS topographic locus map showing the project locus for your review. Should you have any questions regarding this request or require any further information to complete your review, please do not hesitate to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration and assistance.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee
Shelley Jameson – Tennessee

Attachment – USGS topographic quadrangle locus map

ENSR
97 State Road, Sagamore Beach, Massachusetts 02562-2315
T 508.888.3900 F 508.888.6629 www.ensr.aecom.com

October 25, 2007

Jeff Gowan- Planning Director
Pelham Planning Board
6 Village Green
Pelham, NH 03076

Re: Planned Developments Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Pelham, NH

Dear Ms. Demers:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to add a new compressor station in Pelham, New Hampshire, to increase the capacity of an existing Tennessee pipeline. The new compression would create an additional 30,000 dekatherms per day of capacity from Dracut, Massachusetts to Laconia, New Hampshire, to serve the growth needs of the KeySpan/Energy North distribution system. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to construct the new, 6,130 horse-power compressor station on Tennessee's existing system. The facility will be located on a ten-acre tract of land in Pelham primarily within an existing industrial park located off Industrial Park Road (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("FERC") Section 7C application and National Environmental Policy Act ("NEPA") review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to identify any planned residential, industrial, or commercial developments or existing scenic resources within 0.25-miles of the proposed aboveground compressor station to be located in Pelham, New Hampshire.

ENSR requests that the Town of Pelham Planning Board review their records relative to any of the above-referenced areas and provide written comments pertaining to the identified resources. Enclosed is a USGS topographic locus map showing the project locus for your review. Should you have any questions regarding this request or require any further information to complete your review, please do not hesitate to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration and assistance.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee
Shelley Jameson - Tennessee

Attachment - USGS topographic quadrangle locus map

ENSR | AECOM

Memo

To:

From: Nicole Libby

CC:

Date: January 4, 2008

Re: Tennessee – Concord Expansion Project
Jennifer Hovey, Planning Office Manager
Pelham Planning Board
Proposed Developments
Phone Log – January 4, 2008

I called Ms. Hovey regarding ENSR's October 2007 information request for planned developments in Pelham, New Hampshire near the Compressor Station 270B site. ENSR had not received a response to the October 2007 request. Ms. Hovey provided the following information on Planned Developments:

A two lot subdivision has recently been approved on lot 5-124, which abuts the Compressor Station 270B property to the south (east of the existing transmission line Right-of-Way). An approximately 1 acre lot was created in the southeast corner of the parent lot. The newly created lot contains one residential dwelling.

Ms. Hovey was not aware of any other planned or recently approved developments in the vicinity of the Compressor Station 270B property. Ms. Hovey said she would have Jeff Gowan, the Planning Director, call back on Monday if he had anything to add to the information provided.

ENSR
97 State Road, Sagamore Beach, Massachusetts 02562-2416
T 508.888.3900 F 508.888.0889 www.ensrcorp.com

October 25, 2007

Carl Baxter
Waste Management Division, Site Remediation Program
New Hampshire Department of Environmental Services
29 Hazen Drive
Concord, NH 03301

Re: Hazardous Waste Site Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Pelham, NH

Dear Mr. Baxter:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to add a new compressor station in Pelham, New Hampshire, to increase the capacity of an existing Tennessee pipeline. The new compression would create an additional 30,000 dekatherms per day of capacity from Dracut, Massachusetts to Laconia, New Hampshire, to serve the growth needs of the KeySpan/Energy North distribution system. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to construct the new, 6,130 horse-power compressor station on Tennessee's existing system. The facility will be located on a ten-acre tract of land in Pelham primarily within an existing industrial park located off Industrial Park Road (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("FERC") Section 7C application and National Environmental Policy Act ("NEPA") review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to identify the known instances of any hazardous materials spills, sites known to be contaminated with hazardous materials, or sites with on-going environmental remediation activities on or within 0.25 miles of the proposed aboveground compressor station to be located in Pelham, New Hampshire.

ENSR requests that the Waste Management Division review its records relative to any of the above-referenced areas and provide written comments pertaining to the identified resources. Enclosed is a USGS topographic locus map showing the project locus for your review. If you have any questions or comments regarding the proposed project, please feel free to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration and assistance.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee
Shelley Jameson – Tennessee

Attachment - USGS topographic quadrangle locus map

Inventory and Map of Selected Features:
Related to Groundwater and Public Water Supply

This material is available by contacting:

Elizabeth Knowland
File Review Coordinator
N.H. Department of Environmental Services
(603) 271-8808

ENSR
95 State Road, Sagamore Beach, Massachusetts 02562-2415
T 508.888.3900 F 508.888.6889 www.ensraecom.com

October 25, 2007

Mr. Michael Hill
U.S. Environmental Protection Agency
Region 1 Main Regional Office
1 Congress Street , Suite 1100
Boston, MA 02114-2023

Re: Sole Source Aquifer Information Request
Concord Compressor Station Project
Tennessee Gas Pipeline Company
Pelham, NH

Dear Mr. Hill:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to add a new compressor station in Pelham, New Hampshire, to increase the capacity of an existing Tennessee pipeline. The new compression would create an additional 30,000 dekatherms per day of capacity from Dracut, Massachusetts to Laconia, New Hampshire, to serve the growth needs of the KeySpan/Energy North distribution system. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to construct the new, 6,130 horse-power compressor station on Tennessee's existing system. The facility will be located on a ten-acre tract of land in Pelham primarily within an existing industrial park located off Industrial Park Road (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("FERC") Section 7C application and National Environmental Policy Act ("NEPA") review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to identify the presence of any EPA-designated sole-source aquifers on or within 0.25-miles of the proposed aboveground compressor station to be located in Pelham, New Hampshire. Review of online resources relative to EPA-designated sole-source aquifers in New Hampshire reveals that the specified location is outside of the maximum extent of any EPA-designated sole-source aquifers.

ENSR requests that the EPA review its records relative to any of the above-referenced areas and provide written comments pertaining to the identified resources. Enclosed is a USGS topographic locus map showing the project locus for your review. If you have any questions or comments regarding the proposed project, please feel free to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee
Shelley Jameson – Tennessee

Attachment – USGS topographic quadrangle locus map

Zimmer, John

From: Hill.Michael@epamail.epa.gov
Sent: Friday, November 02, 2007 12:32 PM
To: Zimmer, John
Subject: October 25, 2007 Letter Regarding the Tennessee Gas Pipeline in Pelham, NH

Dear Mr. Zimmer:

EPA has reviewed your October 25, 2007 letter regarding the Tennessee Gas Pipeline in Pelham, NH. There is no Sole Source Aquifer designation in this area of New Hampshire. For future reference, here is a web link to the Sole Source Aquifers in New England: http://www.epa.gov/region1/eco/drinkwater/pc_solesource_aquifer.html.

In general, if this or any future proposed compressor stations are located in source water protection areas, care should be taken to ensure that the installation, operation and maintenance of such facilities do not adversely impact groundwater by spills and leaks of chemicals, fuels, hydraulic oils, etc. Proper containment of these materials in source water protection areas is necessary.

Sincerely,

Michael Hill
EPA New England
(617) 918-1398

ENSR
35 State Road, Sagamore Beach, Massachusetts 02562-2416
T 508.888.3900 F 508.888.0689 www.ensr.aecom.com

October 25, 2007

U.S. National Park Service
Environmental Review
Attn: Mr. David Clark
15 State Street
Boston, MA 02109

Re: Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Pelham, NH

Dear Mr. Clark:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to add a new compressor station in Pelham, New Hampshire, to increase the capacity of an existing Tennessee pipeline. The new compression would create an additional 30,000 dekatherms per day of capacity from Dracut, Massachusetts to Laconia, New Hampshire, to serve the growth needs of the KeySpan/Energy North distribution system. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to construct the new, 6,130 horse-power compressor station on Tennessee's existing system. The facility will be located on a ten-acre tract of land in Pelham primarily within an existing industrial park located off Industrial Park Road (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("FERC") Section 7C application and National Environmental Policy Act ("NEPA") review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to identify the presence of any federally designated wild and scenic rivers on or within 0.25-miles of the proposed aboveground compressor station to be located in Pelham, New Hampshire. In addition, the following resources must be identified:

- Lands administered by federal agencies
- Federal natural, recreational or scenic areas
- Natural landmarks and visually-sensitive areas

ENSR requests that the NPS review its records relative to any of the above-referenced areas and provide written comments pertaining to the identified resources. Please find enclosed a USGS topographic locus map showing the project locus for your review. If you have any questions or comments regarding the proposed project, please feel free to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration and assistance.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee
Shelley Jameson - Tennessee

Attachment - USGS topographic quadrangle locus map

ENSR
35 State Road, Sagamore Beach, Massachusetts 02562-2416
T 508.888.3500 F 508.888.5689 www.ensr.aecom.com

Memo

To: File No. 02521-070

From: John Zimmer

CC:

Date: September 13, 2007

Re: Concord Expansion Project
Phone Log - September 13, 2007
Mr. David Clark – U. S. National Park Service
Consultation

On September 13, 2007, I spoke with David Clark with the regulatory branch of the U. S. National Park Service Boston Office (Tele No. 617-223-5141), regarding the consultation letter that was sent to him via certified mail on July 5, 2007. No response had been received prior to the phone conversation.

Mr. Clark indicated that there was a significant backlog regarding regulatory consultations due to a shortage of staff. He indicated that he remembered receiving the letter and that he had reviewed it relative to National Park Service jurisdictional areas. He provided the following verbal responses:

- No designated Wild and Scenic Rivers in Project Area
- No lands administered by federal agencies in Project Area
- No federal natural, recreational or scenic areas in Project Area
- No Natural landmarks or visually-sensitive areas in Project Area.

He further indicated that, due to the current backlog, he would not be providing written correspondence to further document that the proposed project would not impact any of the above areas and that the telephone conversation would serve as final correspondence from the National Park Service.

ENSR
65 State Road, Sagamore Beach, Massachusetts 02562-2415
T 508.888.3900 F 508.888.6689 www.ensraecom.com

October 25, 2007

Mr. Anthony Tur
Endangered Species Specialist
U.S. Fish and Wildlife Service
New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087

Re: Rare Species Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Pelham, NH

Dear Mr. Tur:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to add a new compressor station in Pelham, New Hampshire, to increase the capacity of an existing Tennessee pipeline. The new compression would create an additional 30,000 dekatherms per day of capacity from Dracut, Massachusetts to Laconia, New Hampshire, to serve the growth needs of the KeySpan/Energy North distribution system. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to construct the new, 6,130 horse-power compressor station on Tennessee's existing system. The facility will be located on a ten-acre tract of land in Pelham primarily within an existing industrial park located off Industrial Park Road (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("FERC") Section 7C application and National Environmental Policy Act ("NEPA") review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to identify the presence of any federally listed threatened or endangered species on or within 0.25-miles of the proposed aboveground compressor station to be located in Pelham, New Hampshire.

Based on examination of the county lists for Hillsborough County, it appears that only the small-whorled pogonia has the potential to be located within the review area. ENSR requests that the USFWS review its records relative to threatened and endangered species and provide written comments pertaining to the identified resources. Please find enclosed a USGS topographic locus map showing the project locus for your review. In all cases, ENSR will protect the confidential nature of any information received from the USFWS regarding the specific locations of threatened and endangered species. If you have any questions or comments regarding the proposed project, please feel free to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration and assistance.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee
Shelley Jameson - Tennessee

Attachment – USGS topographic quadrangle locus map

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087

November 30, 2007

Reference:

Project	Location
Natural gas facility compressor station	Pelham, NH

John Zimmer
ENSR Corporation
95 State Road
Sagamore Beach, MA 02562-2415

Dear Mr. Zimmer:

This responds to your recent correspondence requesting information on the presence of federally-listed and/or proposed endangered or threatened species in relation to the proposed activity(ies) referenced above.

Based on information currently available to us, no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under Section 7 of the Endangered Species Act is not required.

This concludes our review of listed species and critical habitat in the project location(s) and environs referenced above. No further Endangered Species Act coordination of this type is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

In order to curtail the need to contact this office in the future for updated lists of federally-listed or proposed threatened or endangered species and critical habitats, please visit the Endangered Species Consultation page on the New England Field Office's website:

www.fws.gov/northeast/newenglandfieldoffice/EndangeredSpec-Consultation.htm

In addition, there is a link to procedures that may allow you to conclude if habitat for a listed species is present in the project area. If no habitat exists, then no federally-listed species are present in the project area and there is no need to contact us for further consultation. If the above conclusion cannot be reached, further consultation with this office is advised. Information describing the nature and location of the proposed activity that should be provided to us for further informal consultation can be found at the above-referenced site.

Thank you for your coordination. Please contact us at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Anthony P. Tur

Anthony P. Tur
Endangered Species Specialist
New England Field Office

Libby, Nicole

From: Libby, Nicole

Sent: Wednesday, January 09, 2008 10:11 AM

To: 'cwilliams@des.state.nh.us'

Subject: Jurisdictional Determination Concurrence Request

Attachments: Fig_1_2a_Site_Location_Comp_Station_270B.pdf; Fig_1_2b_Site_Location_Laconia_Meter_Station.pdf

Mr. Williams,

I am writing in regards to a natural gas Project for Tennessee Gas Pipeline Company proposed in Pelham and Concord, NH.

The Project involves construction of a compressor station in Pelham and modification to an existing meter station in Concord. I had previously sent a letter requesting concurrence on the coastal zone jurisdiction for the Project in October, 2007. Review of the coastal Zone boundary maps as shown on the coastal zone program website identifies the Project locations outside of the Coastal Boundary. Would you mind taking a quick look at the attached Project locus maps, and let me know if you concur with this finding?

Thank you for your time,

Nicole Libby

Nicole Libby
Project Specialist

ENSR
95 State Road
Sagamore Beach, MA 02562-2415
Office (508) 888-3900 ext. 228
Fax (508) 888-6689
Cell (508) 944-2102

Libby, Nicole

From: Williams, Chris [Christian.Williams@des.nh.gov]
To: Libby, Nicole
Sent: Wednesday, January 09, 2008 11:46 AM
Subject: Read: Jurisdictional Determination Concurrence Request

Your message

To: Christian.Williams@des.nh.gov
Subject:

was read on 1/9/2008 11:46 AM.

Libby, Nicole

From: Libby, Nicole
Sent: Wednesday, January 09, 2008 10:52 AM
To: 'chiefwalker@pelhamfire.com'
Subject: Water supplies information request
Attachments: 10-25-07 request.PDF; Fig_1_2a_Site_Location_Comp_Station_270B.pdf

Chief Walker,

Attached is the information request that I discussed with you over the phone this morning and a location map for the proposed Project.

The Project involves construction of a compressor station adjacent to an existing Tennessee Gas Pipeline Company, natural gas pipeline. The proposed compressor station location is in the Pelham Industrial Park off Industrial Park Drive. As part of the FERC and NEPA review process, ENSR is gathering information in regards to public and private water supplies in the vicinity of the Project for the Tennessee Gas Company. Any information you could provide would be greatly appreciated.

Thank you for your time,

Nicole Libby
Project Specialist

ENSR
95 State Road
Sagamore Beach, MA 02562-2415
Office (508) 888-3900 ext. 228
Fax (508) 888-6689
Cell (508) 944-2102

Libby, Nicole

From: Mike Walker [chiefwalker@pelhamfire.com]
To: Libby, Nicole
Sent: Wednesday, January 09, 2008 11:25 AM
Subject: Read: Water supplies information request

Your message

To: chiefwalker@pelhamfire.com
Subject:

was read on 1/9/2008 11:25 AM.

Libby, Nicole

From: Libby, Nicole
Sent: Wednesday, January 09, 2008 11:15 AM
To: 'dlafrazia@dred.state.nh.us'
Subject: Concord Expansion Project Information Request
Attachments: Fig_1_2a_Site_Location_Comp_Station_270B.pdf; Fig_1_2b_Site_Location_Laconia_Meter_Station.pdf; 10-25-07 request.PDF

In regards to our phone conversation this morning, attached are Project location maps for the Tennessee Gas Pipeline Company, Concord Expansion Project. I have also attached the letter sent by ENSR on behalf of Tennessee Gas, requesting information in regards to state lands in the vicinity of the Project.

The Project includes construction of a compressor station in Pelham, NH and modifications to an existing meter station in Concord, NH.

Please let me know if you have any questions or if you have any difficulty opening the attachments. Any information you could provide would be appreciated.

Thank you for your time,

Nicole Libby
Project Specialist

ENSR
95 State Road
Sagamore Beach, MA 02562-2415
Office (508) 888-3900 ext. 228
Fax (508) 888-6689
Cell (508) 944-2102

Libby, Nicole

From: Linda Corriveau [lcorriveau@dred.state.nh.us]
Sent: Wednesday, January 09, 2008 12:11 PM
To: Bill Carpenter
Cc: Denise LaFrazia; Libby, Nicole
Subject: FW: Concord Expansion Project Information Request
Attachments: Fig_1_2a_Site_Location_Comp_Station_270B.pdf; Fig_1_2b_Site_Location_Laconia_Meter_Station.pdf; 10-25-07 request.PDF

Bill, please review the emails below with the following attachments.. This expansion project might involve some DRED properties. Unfortunately, this office in not familiar with this request that was sent in October, therefore, Tennessee Gas Pipeline is requesting a quick turn around. As Land Agent, have you seen the request and what can we do to assist?

-----Original Message-----
From: Denise LaFrazia
Sent: Wednesday, January 09, 2008 11:54 AM
To: Linda Corriveau
Subject: FW: Concord Expansion Project Information Request

Linda, I received a phone call and then this email from Nicole Libby (see attachments). She would like a reply to her request letter to Commissioner Bald dated 10-25-07.
If I can help, let me know.

Denise D. LaFrazia
Administrative Secretary
Planning and Development

State of New Hampshire
Department of Resources and Economic Development
Division of Parks and Recreation
P.O. Box 1856
Concord, NH 03302-1856
603-271-2606
603-271-2629-fax
dlafrazia@dred.state.nh.us
-----Original Message-----
From: Libby, Nicole [mailto:nlibby@ensr.aecom.com]
Sent: Wednesday, January 09, 2008 11:15 AM
To: Denise LaFrazia
Subject: Concord Expansion Project Information Request

In regards to our phone conversation this morning, attached are Project location maps for the Tennessee Gas Pipeline Company, Concord Expansion Project. I have also attached the letter sent by ENSR on behalf of Tennessee Gas, requesting information in regards to state lands in the vicinity of the Project.

The Project includes construction of a compressor station in Pelham, NH and modifications to an existing meter station in Concord, NH.

Please let me know if you have any questions or if you have any difficulty opening the attachments. Any information you could provide would be appreciated.

ENSR
[illegible] Sagamore Beach, Massachusetts 02562-2415
T 508.888.3900 F 508.888.8659 www.ensr.aecom.com

December 7, 2007

New Hampshire Natural Heritage Bureau Review
PO Box 1856
172 Pembroke Road
Concord, NH 03302-1856

Re: Rare Species Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Concord, NH

Natural Heritage Bureau Review:

On behalf of Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation, ENSR is requesting information from the New Hampshire Natural Heritage Bureau ("NHB") regarding the potential presence of state-listed threatened and endangered species as well as any critical habitats known to occur in the vicinity of Tennessee's existing meter station in Concord, New Hampshire. Please find attached a locus map depicting the area to be reviewed. In all cases ENSR will protect the confidential nature of any information received from NHB regarding the specific locations of threatened and endangered species.

If you have any questions or comments regarding the proposed project, please feel free to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee

Attachments - USGS topographic quadrangle locus map
NHB Request Form

Request for a NH Natural Heritage Bureau database check

The NH Natural Heritage Bureau (NHB) maintains a database of known locations of rare species and exemplary natural communities. Federal, state, and local agencies may require a check of this database to determine whether proposed projects could impact rare species. This form should be used to request this type of database check.

NHB will send the results directly to you. It is your responsibility to provide a copy to whatever permitting agency you are dealing with. Information you provide on this form must agree with what you provide in a permit application, or else the NHB check will not be considered to be valid, resulting in delays.

Requested by:

Name: **John Zimmer**
Organization: **ENSR**
Phone number: **(508) 888-3900 x226**
E-mail address: **jzimmer@ensr.aecom.com**
Mailing address: **95 State Road**
Sagamore Beach, MA 02562

Internal Project ID (if any): 02521 073 400

Project Name (*Enter a short descriptive label*): **Concord Expansion Project**

Town: Pelham **Address or Tax Map & Lot #(s):19 Broken Bridge Road Concord, NH**

Total tract acres (*approximate, e.g., nearest acre for small tracts, 10 acres for large*): ~0.5 Acres

Short narrative description of the project (*also check the appropriate descriptive category(s) on page 3*):
Tennessee Gas Pipeline Company ("Tennessee") plans to modify their existing Laconia meter station. Proposed piping modifications will be located entirely within the existing fenced meter station compound. The facility is located on approximately 0.5 acres in Concord, NH off Broken Bridge Road (see attached locus map).

***Maximum* project footprint** (area disturbed during the project). Choose one.

- ☐ New footprint (no existing structure)
- ☒ Completely within an existing footprint (repairs, replacement)
- ☐ Expanding an existing footprint (additional area disturbed adjacent to a previously disturbed location)

Primary Agency/Organization to which you will be applying for a permit (choose one):

- ☐ NH Dept. of Environmental Services (Fill out "NHDES Wetland Applications" section on page 2)
- ☐ NH Dept. of Transportation
- ☐ NH Dept. of Resources and Economic Development (e.g., Trails Bureau)
- ☐ NH Dept. of Agriculture, Markets & Food (e.g., Pesticide Control Board)
- ☐ US Dept. of Energy (e.g., NEPA)
- ☐ US Environmental Protection Agency (e.g., NPDES General Permit for Stormwater Discharges)
- ☐ Town or City
- ☒ Other: Federal Energy Regulatory Commission (**FERC**)

Name of the Permit Applicant, if different from "Requested by": **Tennessee Gas Pipeline Company**

I affirm that the landowner, Tennessee Gas Pipeline Company (print landowner's name) *knows that I am making this request and agrees that NHB should release the data.*

Print your name: John Zimmer **Date: 12/7/07**

A map must be provided, with the site clearly marked. Provide an outline around the maximum area that could be disturbed. Include temporary disturbance (e.g., parking for construction vehicles). Acceptable maps include GIS shapefiles (NH State Plane, NAD 83) or a copy of part of a USGS topographic map (such maps can be printed from the worldwide web, e.g., at www.topozone.com.) Tax maps **cannot** be used unless they include one or inore clearly marked road intersections. GPS coordinates alone are not accepted.

DES Permit by Notification only: Draw the maximum disturbed area (e.g., a single-house lot). Also place a point or line at the site(s) of the permitted activity (e.g., a point at a culvert installation or a line along a utility corridor).

All requests must include a payment of $25 (check or money order, payable to "Treasurer, State of NH"). To ensure that your payment is properly credited, please provide the following:

Check Number:____1329_____

Name of Account (as shown in the check's upper left corner): __ENSR_____

NH Department of Environmental Services (DES) WETLAND APPLICATIONS

Expected Permit Type(s):

- ☐ Standard Dredge and Fill for Wetland Impacts
- ☐ Standard Dredge and Fill for Shoreland Impacts
- ☐ Minimum Impact Expedited
- ☐ Minimum Impact Agriculture
- ☐ Permit by Notification
- ☐ Seasonal Dock Notification for Lakes and Ponds
- ☐ Notification of Forest Management or Timber Harvest
- ☐ Notification of Routine Roadway & Railway Maintenance
- ☐ Notification of Trail Development Activities

To expedite review of possible impacts on wildlife species, please answer the following questions:

Will one or more culverts be installed on perennial streams? Yes / No / Don't Know

If "Yes", what type of culvert(s) is planned?

- ☐ Pipe with interior corrugations
- ☐ Box or elliptical
- ☐ Bridge or span
- ☐ Other or Don't know

Note: DES and the NH Fish & Game Department recommend the use of open-bottomed culverts or bridges at all perennial stream crossings.

To the best of your knowledge, is the project (*see page 4 for definitions*):

in a Tidal Buffer Zone	Yes / No / Don't Know
in Sand Dunes	Yes / No / Don't Know
in or adjacent to a town-designated Prime Wetland	Yes / No / Don't Know
within one-quarter mile of a state-designated River	Yes / No / Don't Know

Are there vernal pools on the property? Yes / No / Don't Know

Requests can be submitted by e-mail, fax, or mail:

E-mail: nhbreview@dred.state.nh.us

Fax: (603) 271-6488, Attn: NHB Review

Mail: NHB Review
PO Box 1856
172 Pembroke Road
Concord, NH 03302-1856

Requests will be processed within 5-10 business days of receipt of payment. Results will be e-mailed if an e-mail address is provided above, otherwise mailed (results will not be faxed). Call (603) 271-2215 x 323 with questions.

Note: Landowners can ask for a check of the database for their property without paying a fee, using a separate Landowner Request Form. However, the results of this type of check are limited to NHB records within property boundaries, and cannot be used for permit or regulatory requirements.

In response to this request, NHB will send you a letter reporting on any known occurrences of rare species or exemplary natural communities in the vicinity of the project. Further review of the project may be needed to assess whether impacts will actually occur, and what if any steps could be taken to reduce those impacts. This review may involve the agency or organization issuing the permit, NHB staff (consulting on rare plants and natural communities), the NH Fish & Game Department, which has jurisdiction over wildlife in NH, and/or the U.S. Fish & Wildlife Service, which has jurisdiction over federally listed species.

Choose as many categories as necessary to describe this project.

Include at least one selection that covers the full extent of the project (maximum area subject to disturbance). For example: "**Buildings and Related Structures** - Residential subdivision" even if only applying for a culvert crossing within the planned subdivision.

Bank Stabilization
- ☐ Bio-engineered restoration
- ☐ Repair bank erosion
- ☐ Retaining wall
- ☐ Rip-rap
- ☐ Stabilize by vegetation

Shoreland Construction / Alteration
- ☐ Beach
- ☐ Boathouse
- ☐ Boat lift
- ☐ Breakwater
- ☐ Boat launch
- ☐ Boat yard
- ☐ Breakwater/dock
- ☐ Bulkhead
- ☐ Canopy, seasonal
- ☐ Channel dredge
- ☐ Dock (permanent)
- ☐ Dock (seasonal)
- ☐ Dock (tidal)
- ☐ Boatslip
- ☐ Dam
- ☐ Marina
- ☐ Personal water craft lift
- ☐ Pilings
- ☐ Rock removal
- ☐ Steps in the bank
- ☐ Seawall

Buildings and Related Structures
- ☐ Apartment/condominium complex
- ☐ Campground
- ☐ Mobile home park
- ☐ Multiple commercial buildings
- ☐ Parking lot only
- ☐ Residential subdivision
- ☐ Single commercial building lot
- ☐ Single residential building lot

Roads, Driveways, Bridges
- ☐ Bridge
- ☐ Culvert(s)
- ☐ Driveway only
- ☐ Foot bridge
- ☐ Guardrail installation
- ☐ Road construction
- ☐ Sidewalk construction
- ☐ Temporary crossing
- ☐ Traffic signal work

Railroads, Transmission lines, Pipelines
- ☐ Pipeline
- ☐ Power station
- ☐ Railroad line
- ☐ Submarine Cable
- ☐ Transmission line
- ☐ Utility crossing

Recreation
- ☐ swim area
- ☐ Recreational facility
- ☐ Trail Bridge
- ☐ Trails
- ☐ Walkway
- ☐ Athletic fields

Forestry and Agricultural Activities
- ☐ Pasture
- ☐ Pond
- ☐ Timber harvest

Chemical and Biological Control Applications
- ☐ Aquatic weed control
- ☐ Biological control application
- ☐ Biosolid application
- ☐ Herbicide application
- ☐ Pesticide application

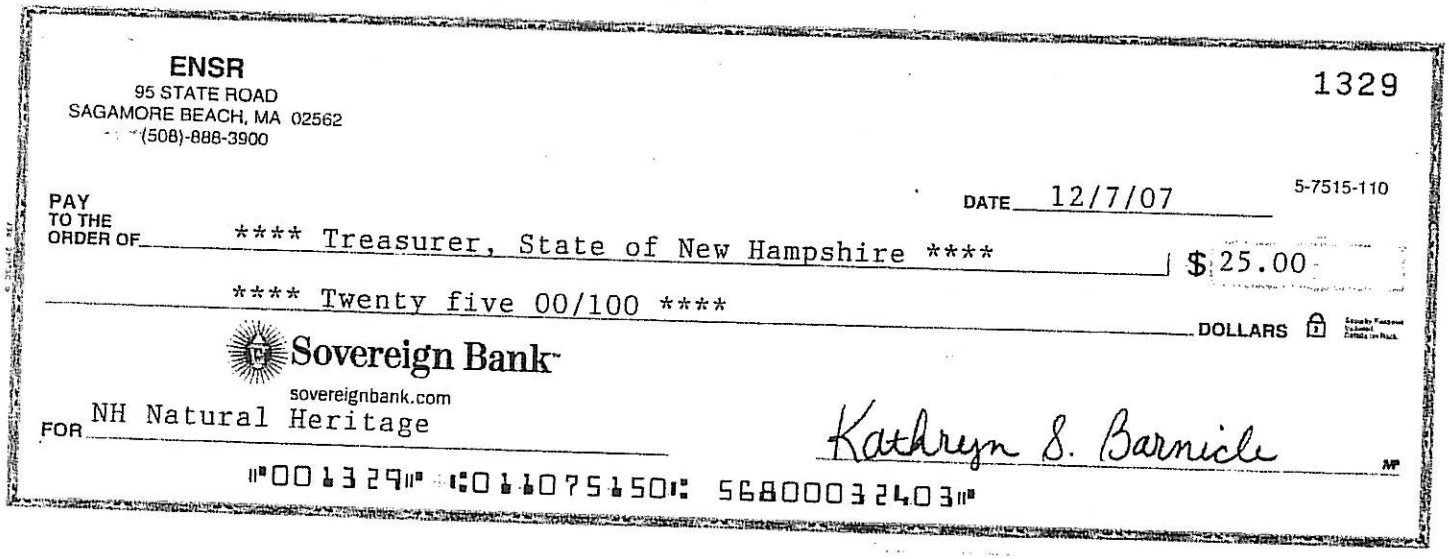
Tower Construction
- ☐ Telecommunications tower
- ☐ Weather station
- ☐ Wind power construction

Water/Wastewater
- ☐ Detention pond
- ☐ Ditch
- ☐ Hydro Raking
- ☐ Pond
- ☐ Sediment removal
- ☐ Septic system
- ☐ Stormwater treatment
- ☐ Stream restoration
- ☐ Treatment swale
- ☐ Wastewater facility
- ☐ Water intake
- ☐ Water storage tank
- ☐ Water supply system
- ☐ Well
- ☐ Wetland creation
- ☐ Wetland restoration

Other
- ☐ Airport improvements
- ☐ Cable
- ☐ Composting facility
- ☐ Contaminant removal
- ☐ Dry hydrant
- ☐ Geotechnical drilling
- ☐ Fish Ladder
- ☐ Gravel operation
- ☐ Landfill
- ☐ Sign installation
- ☐ Storm debris removal

Other Main: Natural Gas meter station

Other Sub: _____



ENSR
95 STATE ROAD
SAGAMORE BEACH, MA 02562
(508)-888-3900

1329

5-7515-110

PAY TO THE ORDER OF **** Treasurer, State of New Hampshire ****

DATE 12/7/07

$ 25.00

**** Twenty five 00/100 ****

DOLLARS

Sovereign Bank
sovereignbank.com

FOR NH Natural Heritage

Kathryn S. Barnicle

⑈001329⑈ ⑆011075150⑆ 568000324031⑈

ENSR
35 State Road, Sagamore Beach, Massachusetts 02562-2415
T 508.888.3900 F 508.888.0841 www.ensr.aecom.com

December 7, 2007

Mr. Anthony Tur
Endangered Species Specialist
U.S. Fish and Wildlife Service
New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087

Re: Rare Species Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Concord, NH

Dear Mr. Tur:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to modify its existing Laconia meter station in Concord, New Hampshire, as part of the Concord Expansion Project. The Project also includes construction of a new compressor station in Pelham, NH, which was the subject of previous correspondence on October 25, 2007. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to conduct piping modifications to their existing Laconia meter station. The proposed modifications will be located entirely within the existing fenced meter station compound located off Broken Bridge Road in Concord, NH (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("FERC") Section 7C application and National Environmental Policy Act ("NEPA") review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to identify the presence of any federally listed threatened or endangered species on or within 0.25-miles of the proposed meter station modifications to be located in Concord, New Hampshire.

Based on examination of the community lists for Concord, NH, it appears that only the Karner blue butterfly has the potential to be located within the review area. ENSR requests that the USFWS review its records relative to threatened and endangered species and provide written comments pertaining to the identified resources. Please find enclosed a USGS topographic locus map showing the project locus for your review. In all cases, ENSR will protect the confidential nature of any information received from the USFWS regarding the specific locations of threatened and endangered species. If you have any questions or comments regarding the proposed project, please feel free to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration and assistance.

Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee

Attachment – USGS topographic quadrangle locus map

Memo

NH NATURAL HERITAGE BUREAU

To: John Zimmer, ENSR
95 State Road
Sagamore Beach, MA 02562

From: Melissa Coppola, NH Natural Heritage Bureau
Date: 12/19/2007 2:05:37 PM (valid for one year from this date)
Re: Review by NH Natural Heritage Bureau
NHB File ID: NHB07-2086 Town: Concord
Project type: Other: natural gas meter station Location: 19 Broken Bridge Road
cc: Kim Tuttle

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

Comments: This site is within an area flagged for possible impacts on the state-listed *Alasmidonta varicosa* (brook floater) in the Soucook River.

Invertebrate Species	**State[1]**	**Federal**	**Notes**
(*Apantesis carlotta*)	--	--	Contact the NH Fish & Game Dept (see below).
A Geometrid Moth (*Eumacaria latiferrugata*)	--	--	Contact the NH Fish & Game Dept (see below).
A Noctuid Moth (*Apharetra dentata*)	--	--	Contact the NH Fish & Game Dept (see below).
A Noctuid Moth (*Platyperigea meralis*)	--	--	Contact the NH Fish & Game Dept (see below).
Barrens Chaetaglaea (*Chaetaglaea tremula*)	--	--	Contact the NH Fish & Game Dept (see below).
Barrens Xylotype (*Xylotype capax*)	--	--	Contact the NH Fish & Game Dept (see below).
Brook Floater (*Alasmidonta varicosa*)	E	--	Contact the NH Fish & Game Dept (see below).
Cobweb Skipper (*Hesperia metea*)	--	--	Contact the NH Fish & Game Dept (see below).
Frosted Elfin Butterfly (*Callophrys irus*)	E	--	Contact the NH Fish & Game Dept (see below).
Pine Barrens Zanclognatha Moth (*Zanclognatha martha*)	T	--	Contact the NH Fish & Game Dept (see below).
Sleepy Duskywing (*Erynnis brizo brizo*)	--	--	Contact the NH Fish & Game Dept (see below).
Southern Pine Sphinx (*Lapara coniferarum*)	--	--	Contact the NH Fish & Game Dept (see below).

Vertebrate species	**State[1]**	**Federal**	**Notes**
Eastern Hognose Snake (*Heterodon platirhinos*)	T	--	Contact the NH Fish & Game Dept (see below).
Grasshopper Sparrow (*Ammodramus savannarum*)	T	--	Contact the NH Fish & Game Dept (see below).

Department of Resources and Economic Development
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DRED/NHB
PO Box 1856
Concord NH 03302-1856

Memo

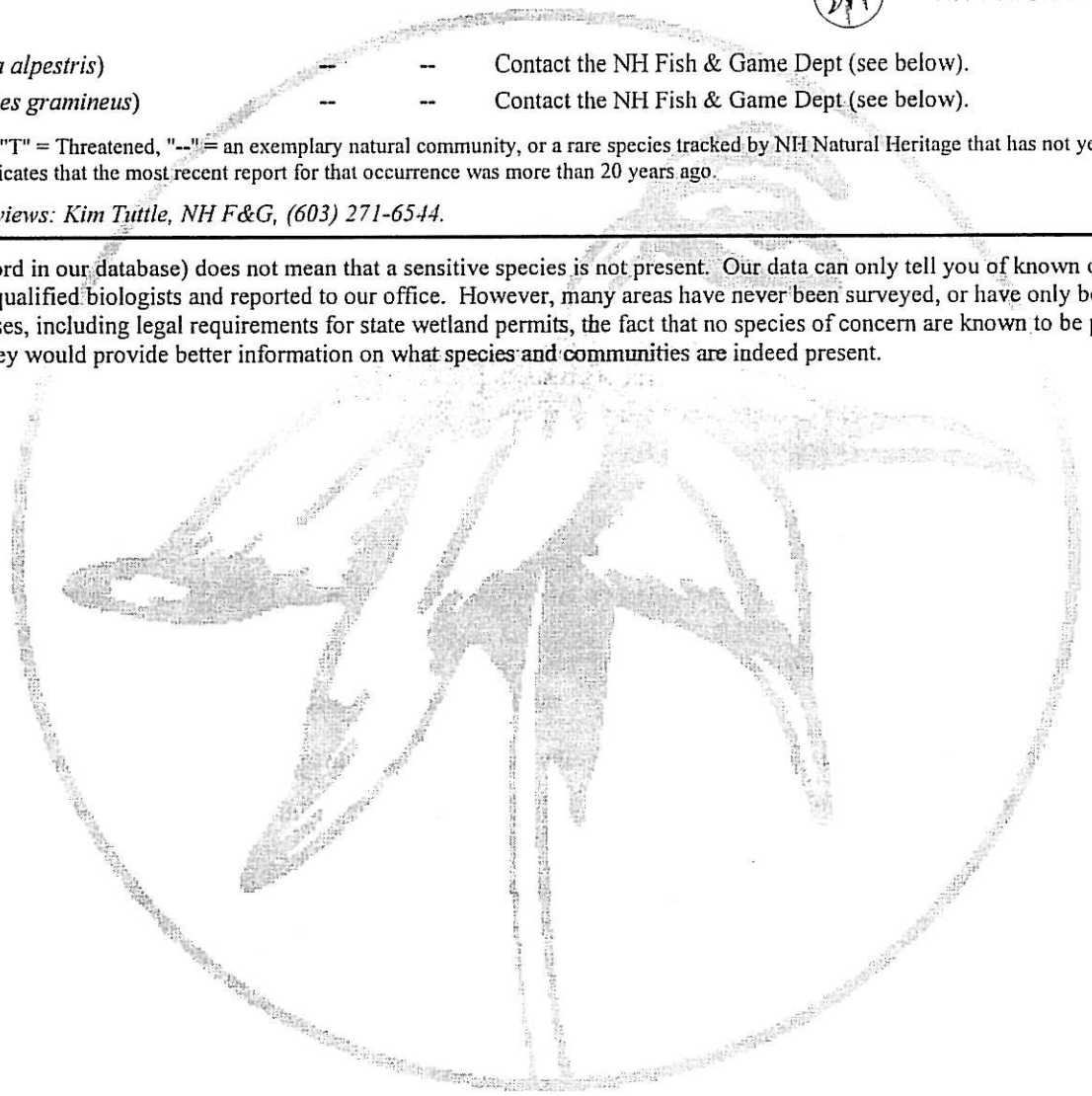
NH NATURAL HERITAGE BUREAU

Horned Lark (*Eremophila alpestris*)	--	--	Contact the NH Fish & Game Dept (see below).
Vesper Sparrow (*Pooecetes gramineus*)	--	--	Contact the NH Fish & Game Dept (see below).

[1]Codes: "E" = Endangered, "T" = Threatened, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

Contact for all animal reviews: Kim Tuttle, NH F&G, (603) 271-6544.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. For some purposes, including legal requirements for state wetland permits, the fact that no species of concern are known to be present is sufficient. However, an on-site survey would provide better information on what species and communities are indeed present.



Department of Resources and Economic Development
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

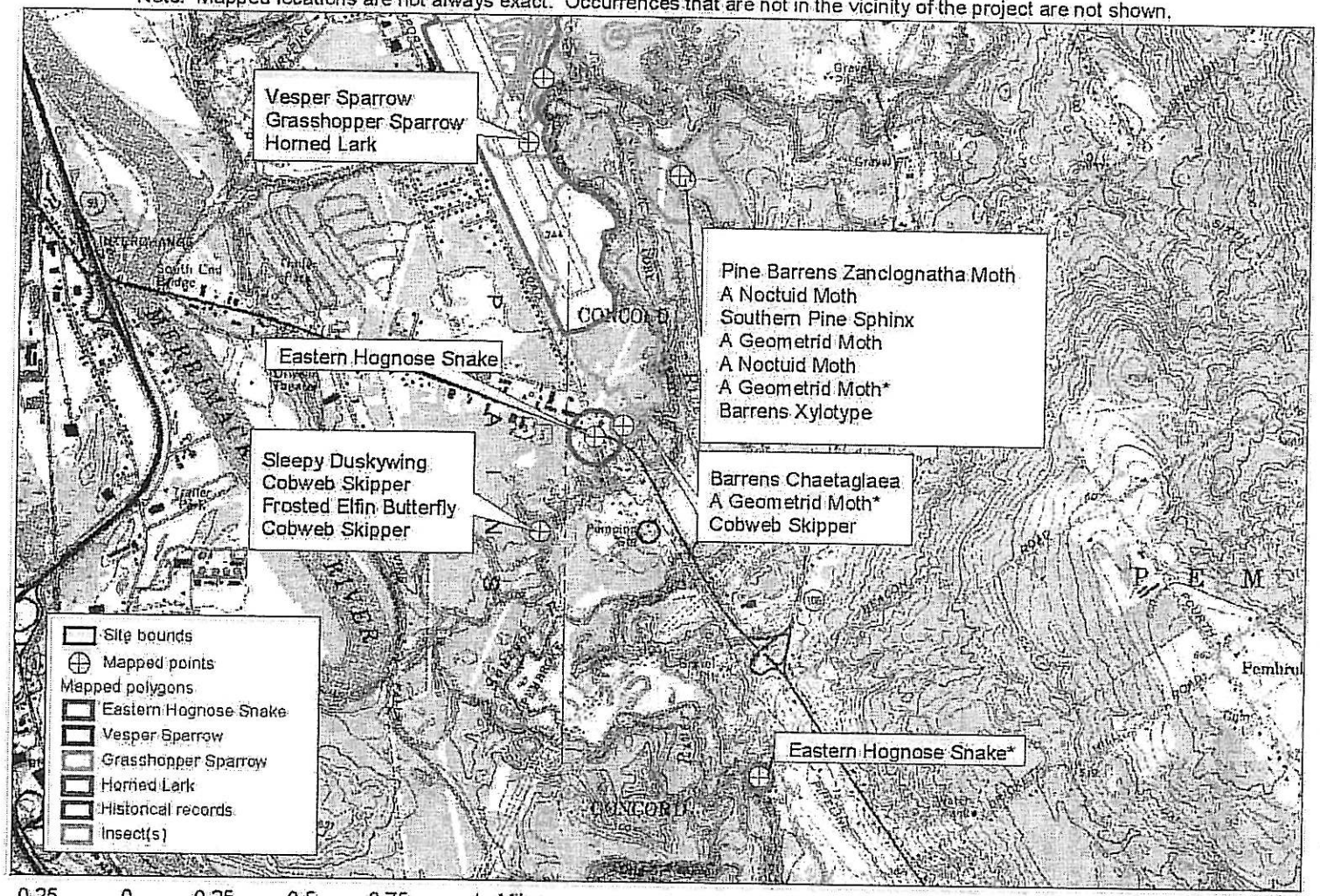
DRED/NHB
PO Box 1856
Concord NH 03302-1856

NHB07-2086

NH NATURAL HERITAGE BUREAU

Known locations of rare species and exemplary natural communities

Note: Mapped locations are not always exact. Occurrences that are not in the vicinity of the project are not shown.



*Historical record

Valid for one year from this date: 19 Dec 2007

New Hampshire Natural Heritage Bureau - Animal Record

Apantesis carlotta

Legal Status	Conservation Status
Federal: Not listed	Global: Demonstrably widespread, abundant, and secure
State: Not listed	State: Not ranked (need more information)

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 1991: Detailed notes not taken.
General Area: 1991: Large blueberry heath opening surrounded by pitch pine and scrub oak barren.
General Comments: 1991: Identified by Dale Schweitzer. Further research needed on life cycle, hatitat needs.
Management Comments:

Location

Survey Site Name: Concord Pine Barrens, Sandy Hollow
Managed By:

County:	Merrimack	USGS quad(s):	Suncook (4307124)
Town(s):	Pembroke	Lat, Long:	431152N, 0712935W
Size:	2.8 acres	Elevation:	250 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 3 miles north on Rte. 106 from Rte. 3. Park in gravel pit on west side of Rte. 106. Walk west to site.

Dates documented

First reported: 1991 Last reported: 1991-08-14

Bidwell, Andy. 1991. Field survey to Concord Pine Barrens on August 14. 1 Specimen collected.

VanLuven, David Erik. 1994. Site conservation plan for the Concord Pine Barrens, Concord, New Hampshire. The Nature Conservancy, New Hampshire Field Office, Concord. includes maps.

New Hampshire Natural Heritage Bureau - Animal Record

A Geometrid Moth (*Eumacaria latiferrugata*)

Legal Status

Federal: Not listed
State: Not listed

Conservation Status

Global: Apparently secure but with cause for concern
State: Rare or uncommon

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 1992: 1 SPECIMAN COLLECTED.
General Area: 1992: LARGE BLUEBERRY HEATH OPENING SURROUNDED BY PITCH PINE AND SCRUB OAK BARREN.
General Comments:
Management Comments:

Location

Survey Site Name: Concord Pine Barrens, Sandy Hollow
Managed By:

County: Merrimack
Town(s): Pembroke
Size: 2.8 acres

USGS quad(s): Suncook (4307124)
Lat, Long: 431152N, 0712935W
Elevation: 250 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: CONCORD PINE BARRENS.

Dates documented

First reported: 1992-08-04 Last reported: 1992-08-04

VanLuven, David. 1992. Night survey to Concord Pine Barrens Main Site on July 30.

VanLuven, David Erik. 1994. Site conservation plan for the Concord Pine Barrens, Concord, New Hampshire. The Nature Conservancy, New Hampshire Field Office, Concord. includes maps.

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

A Geometrid Moth (*Eumacaria latiferrugata*)

Legal Status		Conservation Status	
Federal:	Not listed	Global:	Apparently secure but with cause for concern
State:	Not listed	State:	Rare or uncommon

Description at this Location

Conservation Rank: Historical records only - current condition unknown.
Comments on Rank:

Detailed Description: 2001: 10 specimens collected at light traps from 4 sites (4 each at DZ-6 and CZ-4a, 1 each at DZ-1 and I-393). 1992: 1 specimen collected. 1985: 1 specimen collected. 1979: No details.

General Area: 2001: Mature pitch pine/scrub oak forest (CZ-4a and DZ-1), mature pitch pine forest with little scrub oak present (I-393) and regrowth forest, 6+ years old (DZ-6). 1992: Large blueberry heath surrounded by pitch pine and scrub oak barren (Sandy Hollow). 1985: Pine barrens. Area bisected by powerline (main site).

General Comments: 2001: The "Universal Black Light Trap" produced by BioQuip, with a 12-watt UV light and a photoelectric switch, was used at all sites except CZ-4a, where a large "Ellisco" type stainless steel light trap with a 15-watt UV light and an adjustable photoelectric switch was used. The Ellipso light was self-supported and was left at the site throughout the sampling period. The smaller traps were either hung from tree limbs, or rested on the ground in grasslands, and were removed after each sampling night. Ethyl acetate was used as the killing agent in both trap types. Traps were set, when possible, on warm cloudy nights when it was unlikely that it would rain. 1985: Larval food plant here (main site) is Prunus pumila var. cuneata (sand cherry).

Management Comments: 1985: Controlled fire necessary (main site).

Location

Survey Site Name: Concord Pine Barrens
Managed By: Airport Bluff + Floodplain

County:	Merrimack	USGS quad(s):	Suncook (4307124)
Town(s):	Concord	Lat, Long:	431242N, 0712920W
Size:	68.6 acres	Elevation:	310 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Six sites on and around the Concord Municipal Airport in Concord Heights: DZ-1: [Near the north end of the Concord Municipal Airport in Concord Heights.] CZ-4a (2001): [Near the southeast end of the Concord Municipal Airport in Concord Heights.] DZ-6 (2001): From the intersection of Rte 3 (Manchester Street) and Airport Road in Concord Heights the site is ca. 600 feet slightly north of due east. I-393 (2001): [From I93 north take Exit 15 to Rte. 393 east.] Site is on the south side of Rte. 393, ca. 1.7 miles from the I93 exit. Main site (1979, 1985): from the intersection of Rte. 106 and Pembroke Road in Concord, take Pembroke Road west ca. 0.25 mile. Park at NH Department of Resources and Economic Development on left. Walk ca. 0.2 miles further west on Pembroke Road to powerline crossing. Take path south under powerlines ca. 0.1 mile towards bend in powerlines. Sandy Hollow (1992): [An area east of the Concord aiport, just south and east of right-angle bend in the Soucook River where it changes from a west-flowing to a south-flowing route.]

Dates documented

First reported:	1979	Last reported:	1985-05-20

VanLuven, David. 1992. Night survey to Concord Pine Barrens Main Site on July 30.

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

Chandler, Donald. 2001. NH Army National Guard Butterfly and Moth Survey, 2002. Final Report. Submitted to The Adjutant General of New Hampshire. Concord, NH.

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

A Noctuid Moth (*Apharetra dentata*)

Legal Status		Conservation Status	
Federal:	Not listed	Global:	Apparently secure but with cause for concern
State:	Not listed	State:	Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 2001: 33 individuals total at three trap sites: 22 specimens collected at CZ-4a (17 trap nights between April and November), 9 individuals at Karner Blue South/main site (7/18), and 2 at Karner Blue South (7/18). 1993: 1 specimen collected at trap site (CAIP Phase III). 1992: 14 individuals: 13 at main site (7/19), 1 at Sandy Hollow (8/4).

General Area: 2001: Mature pitch pine/scrub oak forest (CZ-4a). Mature pitch pine/scrub oak forest, with young forest beneath powerlines (main site/Karner Blue North). Scattered mature pitch pine with extensive scrub oak or blueberry barrens (Karner Blue South). 1993: Woodland portions of pitch pine/scrub oak barrens. Windsor sandy loam and Hinckley cobbly sandy loam soil (CAIP Phase III). 1992: Pine barrens. Scrub oak, pitch pine (main site). Large blueberry heath opening surrounded by pitch pine and scrub oak barrens (Sandy Hollow).

General Comments: 2001: The "Universal Black Light Trap" produced by BioQuip, with a 12-watt UV light and a photoelectric switch, was used at all sites except CZ-4a, where a large "Ellisco" type stainless steel light trap with a 15-watt UV light and an adjustable photoelectric switch was used. The Ellipso light was self-supported and was left at the site throughout the sampling period. The smaller traps were either hung from tree limbs, or rested on the ground in grasslands, and were removed after each sampling night. Ethyl acetate was used as the killing agent in both trap types. Traps were set, when possible, on warm cloudy nights when it was unlikely that it would rain.

Management Comments:

Location

Survey Site Name: Concord Pine Barrens
Managed By: Karner Blue Natl. Wildlife Refuge - Area A

County:	Merrimack	USGS quad(s):	Suncook (4307124)
Town(s):	Concord	Lat, Long:	431242N, 0712920W
Size:	122.5 acres	Elevation:	330 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Five sites on and around the Concord Municipal Airport in Concord Heights. Main site/Karner Blue North (2001): From the intersection of Rte. 106 and Pembroke Road in Concord Heights, take Pembroke Road south ca. 0.5 mile to powerline corridor. Site is south of the road, adjacent to and east of the powerline right-of-way. Karner Blue South (2001): [Near the east end of the Concord Municipal Airport in Concord Heights.] Southeast corner of the Karner Blue Preserve. CZ-4a (2001): Near the southeast end of the airport. CAIP Phase III (1993): [From the intersection of Pembroke Road and Branch Turnpike, an area stretching south for ca. 2,000 feet and up to 1,000 feet east or west, between Pembroke Road and the airport runways.] Sandy Hollow (1993): [An area east of the Concord airport, just south and east of right-angle bend in the Soucook River where it changes from a west-flowing to a south-flowing route.]

Dates documented

First reported:	1992-07-30	Last reported:	2001-07-18

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

VanLuven, David. 1992. Collection at Concord Pine Barrens Main Site on 30 July.

Chandler, Donald. 2001. NH Army National Guard Butterfly and Moth Survey, 2002. Final Report. Submitted to The Adjutant General of New Hampshire. Concord, NH.

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

A Noctuid Moth (*Platyperigea meralis*)

Legal Status		Conservation Status	
Federal:	Not listed	Global:	Apparently secure but with cause for concern
State:	Not listed	State:	Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 1992: One specimen collected.
General Area: 1992: Large blueberry heath opening surrounded by pitch pine AND scrub oak barren.
General Comments:
Management Comments:

Location

Survey Site Name: Concord Pine Barrens, Sandy Hollow
Managed By:

County:	Merrimack	USGS quad(s):	Suncook (4307124)
Town(s):	Pembroke	Lat, Long:	431152N, 0712935W
Size:	2.8 acres	Elevation:	250 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 3 miles north on Rte. 106 from Rte. 3. Park in gravel pit on west side of Rte. 106. Walk west to site.

Dates documented

First reported:	1992-08-31	Last reported:	1992-08-31

VanLuven, David. 1992. Field surveys of Concord Pine Barrens Main site in summer 1992; 1992 Karner Blue Status Report by TNC for USFWS.

VanLuven, David Erik. 1994. Site conservation plan for the Concord Pine Barrens, Concord, New Hampshire. The Nature Conservancy, New Hampshire Field Office, Concord. includes maps.

New Hampshire Natural Heritage Bureau - Animal Record

Barrens Chaetaglaea (*Chaetaglaea tremula*)

Legal Status		Conservation Status	
Federal:	Not listed	Global:	Demonstrably widespread, abundant, and secure
State:	Not listed	State:	Not ranked (need more information)

Description at this Location

Conservation Rank:	Not ranked
Comments on Rank:	
Detailed Description:	2001: 10 individuals collected at five trap sites (1-3 per trap) between April and November. 1991: No details.
General Area:	2001: Grassland (CZ-1), mature pitch pine/scrub oak forest (CZ-4a and DZ-1), recently disturbed site across a ravine from mature forest (CZ-4b), and regrowth forest, 6+ years old (DZ-6). 1991: Edge of grassy opening along powerline right-of-way. Bordered by dense pitch pine woodlands (main site).
General Comments:	1991: Identified by Dale Schweitzer.
Management Comments:	1991: Threats include TAFA facility expansion and right-of-way maintenance (main site).

Location

Survey Site Name:	Concord Pine Barrens		
Managed By:	Airport Bluff + Floodplain		
County:	Merrimack	USGS quad(s):	Suncook (4307124)
Town(s):	Concord	Lat, Long:	431242N, 0712920W
Size:	38.2 acres	Elevation:	330 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Six sites on and around the Concord Municipal Airport in Concord Heights: DZ-1 and CZ-1 (2001): [Near the north end of the Concord Municipal Airport in Concord Heights.] CZ-4a and CZ-4b (2001): [Near the southeast end of the Concord Municipal Airport in Concord Heights.] DZ-6 (2001): From the intersection of Rte 3 (Manchester Street) and Airport Road in Concord Heights the site is ca. 600 feet slightly north of due east. Main site/Karner Blue North (1991): From the intersection of Rte. 106 and Pembroke Road in Concord, take Pembroke Road west ca. 0.25 mile. Park at NH Department of Resources and Economic Development on left. Walk ca. 0.2 miles further west on Pembroke Road to powerline crossing. Take path south under powerlines ca. 0.1 mile towards bend in powerlines.

Dates documented

First reported:	1991-09-03	Last reported:	2001

Bidwell, Andy. 1991. Field survey to Concord Pine Barrens on September 3. 7 Specimens Taken.

Chandler, Donald. 2001. NH Army National Guard Butterfly and Moth Survey, 2002. Final Report. Submitted to The Adjutant General of New Hampshire. Concord, NH.

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Barrens Xylotype (*Xylotype capax*)

Legal Status		Conservation Status	
Federal:	Not listed	Global:	Apparently secure but with cause for concern
State:	Not listed	State:	Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 2001: 4 specimens collected at 2 sites (3 at DZ-1, 1 at CZ-4a). 1991: 3 specimens collected at 2 sites (2 at a south-facing bluff, 1 at Sandy Hollow).

General Area: 2001: Mature pitch pine/scrub oak forest (CZ-4a and DZ-1). 1991: At the south-facing bluff: sandy bluff with *Lupinus perennis* (wild lupine) along eroded sandy trail, bordered by somewhat dense pitch pine/scrub oak woodland. At Sandy Hollow: Large blueberry heath opening surrounded by pitch pine and scrub oak barren.

General Comments: 2001: The "Universal Black Light Trap" produced by BioQuip, with a 12-watt UV light and a photoelectric switch, was used at all sites except CZ-4a, where a large "Ellisco" type stainless steel light trap with a 15-watt UV light and an adjustable photoelectric switch was used. The Ellipso light was self-supported and was left at the site throughout the sampling period. The smaller traps were either hung from tree limbs, or rested on the ground in grasslands, and were removed after each sampling night. Ethyl acetate was used as the killing agent in both trap types. Traps were set, when possible, on warm cloudy nights when it was unlikely that it would rain. 1991: Specimens identified by Dale Schweitzer.

Management Comments: 1991: Offroad vehicle traffic and trash at south-facing bluff. Recent clearing and road for development nearby at Sandy Hollow.

Location

Survey Site Name: Concord Pine Barrens
Managed By: Airport Bluff + Floodplain

County:	Merrimack	USGS quad(s):	Suncook (4307124)
Town(s):	Pembroke	Lat, Long:	431152N, 0712934W
Size:	41.8 acres	Elevation:	250 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Four sites on and around the Concord Municipal Airport in Concord Heights. DZ-1 (2001): [Near the north end of the Concord Municipal Airport in Concord Heights.] CZ-4a (2001): [Near the southeast end of the Concord Municipal Airport in Concord Heights.] South-facing slope east of airport (1991): From the fence at the east end of the east-west runway, take path running south. Go up a hill at the southern corner of the fencing and travel along the top of a ridge for a ways before descending the slope of the site. Sandy Hollow (1991): [An area east of the Concord aiport, just south and east of right-angle bend in the Soucook River where it changes from a west-flowing to a south-flowing route.]

Dates documented

First reported: 1991-09-13 Last reported: 2001

Bidwell, Andy. 1991. Field survey to Pine Barrens on September 10. 1 Specimen collected.

Chandler, Donald. 2001. NH Army National Guard Butterfly and Moth Survey, 2002. Final Report. Submitted to The Adjutant General of New Hampshire. Concord, NH.

New Hampshire Natural Heritage Bureau - Animal Record

Cobweb Skipper (*Hesperia metea*)

Legal Status	Conservation Status
Federal: Not listed	Global: Apparently secure but with cause for concern
State: Not listed	State: Rare or uncommon

Description at this Location

Conservation Rank: Not ranked
Comments on Rank: Insufficient information available for ranking.

Detailed Description: 1995: Sight record.
General Area: 1995: Pitch pine/scrub oak barrens. Windsor sandy loam and Hinckley cobbly sandy loam soil. Grassy openings in pitch pine/scrub oak barrens.
General Comments:
Management Comments:

Location

Survey Site Name: Powerline Bluff and Barrens South of Rte 3
Managed By:

County: Merrimack
Town(s): Concord
Size: 2.8 acres
USGS quad(s): Concord (4307125)
Lat, Long: 431059N, 0713003W
Elevation: 270 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Concord Pine Barrens, powerline bluff south of Rte 3.

Dates documented

First reported: 1995-05-24 Last reported: 1995-05-24

VanLuven, David. [Pine Barrens Ecologist]. The Nature Conservancy, New Hampshire Field Office. 2 1/2 Beacon Street, Concord, NH 03301. 603/224-5853.

VanLuven, David Erik. 1994. Site conservation plan for the Concord Pine Barrens, Concord, New Hampshire. The Nature Conservancy, New Hampshire Field Office, Concord. includes maps.

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Cobweb Skipper (*Hesperia metea*)

Legal Status		Conservation Status	
Federal:	Not listed	Global:	Apparently secure but with cause for concern
State:	Not listed	State:	Rare or uncommon

Description at this Location

Conservation Rank: Not ranked
Comments on Rank: INSUFFICIENT INFORMATION AVAILABLE FOR RANKING.

Detailed Description: 1995: 4 SPECIMENS COLLECTED.
General Area: 1995: PITCH PINE/SCRUB OAK BARRENS. WINDSOR SANDY LOAM AND HINCKLEY COBBLY SANDY LOAM SOIL. GRASSY OPENINGS IN PITCH PINE/SCRUB OAK BARRENS.
General Comments:
Management Comments:

Location

Survey Site Name: Safeways Management Area
Managed By: Airport Bluff + Floodplain

County:	Merrimack	USGS quad(s):	Concord (4307125)
Town(s):	Concord	Lat, Long:	431242N, 0712921W
Size:	84.3 acres	Elevation:	350 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: CONCORD. CONCORD PINE BARRENS, AIRPORT SITE.

Dates documented

First reported:	1995-05-22	Last reported:	1995-05-22

VanLuven, David. [Pine Barrens Ecologist]. The Nature Conservancy, New Hampshire Field Office. 2 1/2 Beacon Street, Concord, NH 03301. 603/224-5853.

VanLuven, David Erik. 1994. Site conservation plan for the Concord Pine Barrens, Concord, New Hampshire. The Nature Conservancy, New Hampshire Field Office, Concord. includes maps.

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Frosted Elfin Butterfly (*Callophrys irus*)

Legal Status		Conservation Status	
Federal:	Not listed	Global:	Rare or uncommon
State:	Listed Endangered	State:	Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank:	Not ranked
Comments on Rank:	
Detailed Description:	1992: Individual(s) visually identfied (photo on file at TNC) during presence/absence monitoring. 1988: Grey specimens taken.
General Area:	1992: Grassy openings in pitch pine/scrub oak barrens containing *Lupinus perennis*. 1988: With Arctostaphylos and Erynnis brizo brizo.
General Comments:	
Management Comments:	1992: The survey site is being overgrown by Quercus ilicifolia, Populus tremuloides, and Betula populifolia. The aerial coverage of these species needs to be reduced through regular cutting.

Location

Survey Site Name: Powerline Bluff and Barrens South of Rte 3
Managed By:

County:	Merrimack	USGS quad(s):	Concord (4307125)
Town(s):	Concord	Lat, Long:	431059N, 0713003W
Size:	2.8 acres	Elevation:	270 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Powerline bluffs and barrens south of Rte 3.

Dates documented

First reported: 1988-05-07 Last reported: 1992-06-03

VanLuven, David. 1992. Field surveys to Concord Pine Barrens.

VanLuven, David Erik. 1994. Site conservation plan for the Concord Pine Barrens, Concord, New Hampshire. The Nature Conservancy, New Hampshire Field Office, Concord. includes maps.

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Frosted Elfin Butterfly (*Callophrys irus*)

Legal Status		Conservation Status	
Federal:	Not listed	Global:	Rare or uncommon
State:	Listed Endangered	State:	Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 1990: Barrens have been cut adjacent to bluff.
General Area: A small area of scrub oak-dominated pine barrens is here. The site is significant for occurrences of wild lupine, *Hudsonia tomentosa*, and Frosted Elfin.
General Comments:
Management Comments:

Location

Survey Site Name: Lupine Bluff Rte. 3
Managed By: Airport Bluff + Floodplain

County:	Merrimack	USGS quad(s):	Suncook (4307124)
Town(s):	Concord	Lat, Long:	431115N, 0712946W
Size:	2.8 acres	Elevation:	250 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: North of Rte. 3 and west of the Soucook River atop the sand plain.

Dates documented

First reported: 1988 Last reported: 1988-05

Schweitzer, Dale. 1988. Field survey to Route 3 bluff in May.

VanLuven, David Erik. 1994. Site conservation plan for the Concord Pine Barrens, Concord, New Hampshire. The Nature Conservancy, New Hampshire Field Office, Concord. includes maps.

New Hampshire Natural Heritage Bureau - Animal Record

Pine Barrens Zanclognatha Moth (*Zanclognatha martha*)

Legal Status		Conservation Status	
Federal:	Not listed	Global:	Apparently secure but with cause for concern
State:	Listed Threatened	State:	Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank:	Not ranked
Comments on Rank:	Insufficient information available for ranking.
Detailed Description:	1992: 2 specimens collected with blacklight trap.
General Area:	1992: Pitch pine/scrub oak barrens. Windsor sandy loam and Hinckley cobbly sandy loam soil. This species inhabits sandy communities with *Pinus rigida* (pitch pine).
General Comments:	
Management Comments:	

Location

Survey Site Name: Concord Pine Barrens, Sandy Hollow
Managed By:

County:	Merrimack	USGS quad(s):	Suncook (4307124)
Town(s):	Pembroke	Lat, Long:	431152N, 0712935W
Size:	2.8 acres	Elevation:	250 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Concord Pine Barrens, Sandy Hollow site.

Dates documented

First reported:	1992-08-04	Last reported:	1992-08-04

VanLuven, David. 1992. Field surveys to Concord Pine Barrens.

VanLuven, David Erik. 1994. Site conservation plan for the Concord Pine Barrens, Concord, New Hampshire. The Nature Conservancy, New Hampshire Field Office, Concord. includes maps.

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Sleepy Duskywing (*Erynnis brizo brizo*)

Legal Status		Conservation Status	
Federal:	Not listed	Global:	Demonstrably widespread, abundant, and secure
State:	Not listed	State:	Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 1988: Richard Grey specimens.
General Area: With Arctostaphylos and Incisalia irus.
General Comments: Dale Schweitzer made final identification.
Management Comments:

Location

Survey Site Name: Powerline Bluff and Barrens South of Rte 3
Managed By:

County:	Merrimack	USGS quad(s):	Concord (4307125)
Town(s):	Concord	Lat, Long:	431059N, 0713003W
Size:	2.8 acres	Elevation:	270 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Powerline bluffs and barrens south of Rte 3.

Dates documented

First reported:	1988	Last reported:	1988-05-07

Grey, Richard. 1988. Field survey to Powerline Bluffs and Barrens South of Rte 3 on 8 May.

VanLuven, David Erik. 1994. Site conservation plan for the Concord Pine Barrens, Concord, New Hampshire. The Nature Conservancy, New Hampshire Field Office, Concord. includes maps.

New Hampshire Natural Heritage Bureau - Animal Record

Southern Pine Sphinx (*Lapara coniferarum*)

Legal Status		Conservation Status	
Federal:	Not listed	Global:	Demonstrably widespread, abundant, and secure
State:	Not listed	State:	Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank:	Not ranked
Comments on Rank:	Insufficient information available for ranking.
Detailed Description:	1992: Specimen collected with blacklight trap.
General Area:	1996: Area undeveloped. 1992: Pitch pine/scrub oak barrens. Windsor sandy loam and Hinckley cobbly sandy loam soil. This species inhabits woodlands and forests dominated by pines.
General Comments:	1992: Ca. 1-2 acres burned by wildfires.
Management Comments:	

Location

Survey Site Name: Concord Pine Barrens, Sandy Hollow
Managed By:

County:	Merrimack	USGS quad(s):	Suncook (4307124)
Town(s):	Pembroke	Lat, Long:	431152N, 0712935W
Size:	2.8 acres	Elevation:	250 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 3 miles north on Rte. 106 from Rte. 3. Park in gravel pit on west side of Rte. 106. Walk west to site.

Dates documented

First reported: 1992-08-04 Last reported: 1992-08-04

VanLuven, David. 1992. Field surveys to Concord Pine Barrens.

VanLuven, David Erik. 1994. Site conservation plan for the Concord Pine Barrens, Concord, New Hampshire. The Nature Conservancy, New Hampshire Field Office, Concord. includes maps.

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Eastern Hognose Snake (*Heterodon platirhinos*)

Legal Status		Conservation Status	
Federal:	Not listed	Global:	Demonstrably widespread, abundant, and secure
State:	Listed Threatened	State:	Rare or uncommon

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 1992: observed. (Obs_id 1992.0957).
General Area: 1992: yard, pine barrens (Obs_id 1992.0957).
General Comments:
Management Comments:

Location

Survey Site Name: Airport Road, US 3
Managed By:

County:	Merrimack	USGS quad(s):	Suncook (4307124)
Town(s):	Concord	Lat, Long:	431114N, 0712952W
Size:	11.4 acres	Elevation:	

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 1992: Broken Bridge Road, near Louis Diner. [The corner of Broken Bridge Rd. and Rte. 3.] (Obs_id 1992.0957).

Dates documented

First reported:	1992-09-29	Last reported:	1992-09-29

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Eastern Hognose Snake (*Heterodon platirhinos*)

Legal Status	Conservation Status
Federal: Not listed	Global: Demonstrably widespread, abundant, and secure
State: Listed Threatened	State: Rare or uncommon

Description at this Location

Conservation Rank: Historical records only - current condition unknown.
Comments on Rank:

Detailed Description: 1963: 2 individuals observed by not collected.
General Area:
General Comments: Toads breed in the pond by the sandpit.
Management Comments:

Location

Survey Site Name: Gravel Pit near Soucook River
Managed By:

County: Merrimack
Town(s): Pembroke
Size: 2.8 acres
USGS quad(s): Suncook (4307124)
Lat, Long: 431023N, 0712917W
Elevation: 300 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Pembroke. 2 Sites: In sand pit behind Cling's Autobody (Junkyard); by a horse barn ca. 0.25 miles north of the sand pit. (Mapped sand pit at end of dirt road off Rte. 3 by Suncook River.

Dates documented

First reported: 1963 Last reported: 1963

Allgeyer, Pam. Box 244, Dearborn Road, Suncook, NH 03275. 603/485-5231.

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Grasshopper Sparrow (*Ammodramus savannarum*)

Legal Status		Conservation Status	
Federal:	Not listed	Global:	Demonstrably widespread, abundant, and secure
State:	Listed Threatened	State:	Not ranked (need more information)

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 2004: 2 adult males, 1 adult female on 5/19. How observed: heard, seen (Obs_id 2434). 3 adult males, 3 adult females on 5/19. How observed: heard, seen (Obs_id 2435). 3 adult males, 3 adult females, 2 immature, sex unknowns on 5/19. How observed: heard, seen (Obs_id 2433). 1 adult male on 5/27. How observed: heard, seen (Obs_id 2436). 1 adult male on 6/7. How observed: heard, seen (Obs_id 2432). 2002: 1 adult male seen 6/3 (Obs_id 159) 2 adult males, 1 adult female seen 6/26-7/24 (Obs_id 151). 1 adult male seen 6/19-7/10 (Obs_id 152). 2 adult males, 1 adult female seen 6/19-7/24 (Obs_id 154). 1 adult male seen 6/19-7/24 (Obs_id 155). 1 adult male seen 6/19-7/10 (Obs_id 156). 2 adult males, 2 adult females seen 6/19-7/24 (Obs_id 157). 2 adult males, 2 adult females seen 6/3-7/10 (Obs_id 158). 1999: 1 adult male, 1 adult, sex unknown seen (Obs_id 264). 1997: 1 adult, sex unknown seen (Obs_id 263).

General Area: 2004, 2002, 1999, 1997: Terrestrial - Grassland / Field.

General Comments: 2004: Two territories filled the southern 2/3 of this habitat island. A pair was known from the southern of the two, and the female of this pair performed a distraction display on June 23, suggesting that a nest was nearby (Obs_id 2434). Three territories occupied this area, all three of which were mated pairs of birds. No conclusive evidence of breeding was obtained, although the female of one pair showed agitated behavior on one visit, suggesting the possibility of a nest or young (Obs_id 2435). Three territories filled most of the space between the runway and the edge of grassy habitat to the west. All three territories contained pairs, and at least one of these produced at least 2 young (Obs_id 2433). A single male occupied this area, but there was no evidence that he ever attracted a mate (Obs_id 2436). During June, most sightings came from south end of central triangle between runways, whereas in July the bird was always south of the intersection. This suggests it may have been unable to find a mate and shifted its territory part way through the season (Obs_id 2432). 2002: Also present on June 19, but no clear evidence of a female in this territory (Obs_id 159). One definite pair and at least an additional male at this location. Insufficient data to determine if second male was mated (Obs_id 151). No sign of female at this location - assuming male was unmated (Obs_id 152). One definite mated pair at this location. No clear evidence of a female in territory of second male (Obs_id 154). Males singing consistently at sites but no evidence of female in territory (Obs_id 155, 156). Two pairs; both seen carrying food for young on June 19. Possibly a juvenile seen on July 24, (Obs_id 157). Two pairs, but no clear evidence of breeding success (Obs_id 158). 1999: One bird singing, nature of second bird not recorded (Obs_id 264). 1997: Seen only, did not respond to playback (Obs_id 263).

Management Comments:

Location

Survey Site Name: Concord Airport
Managed By: Airport Bluff + Floodplain

County: Merrimack
Town(s): Concord
Size: 237.3 acres

USGS quad(s): Concord (4307125)
Lat, Long: 431157N, 0713006W
Elevation:

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Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2004: Concord Airport - Intersection of main runway and unused runway (Obs_id 2432). East side of runway at southern end (Obs_id 2433). Southernmost island between runway and taxiway (Obs_id 2434). South end of airport between runway end and fence (Obs_id 2435). South of southern airport fence (Obs_id 2436). 2002: Outside of fence at south end of Concord Airport (Obs_id 159). 2002: North end of runway at Concord Airport (Obs_id 151). East of terminal at Concord Airport (Obs_id 152). Grassy triangle between runways at Concord Airport (Obs_id 154). North of intersection of two secondary runways at Concord Airport (Obs_id 155). Midway down main runway at Concord Airport (Obs_id 156). Wide grassy area east of south end of main runway at Concord Airport (Obs_id 157). South of main runway at Concord Airport (Obs_id 158). Southern end of Concord Airport (Obs_id 264). Southern end of Concord Airport (Obs_id 263).

Dates documented

First reported:	1997-06-24	Last reported:	2004-08-03

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Horned Lark (*Eremophila alpestris*)

Legal Status		Conservation Status	
Federal:	Not listed	Global:	Demonstrably widespread, abundant, and secure
State:	Not listed	State:	Not ranked (need more information)

Description at this Location

Conservation Rank:	Not ranked
Comments on Rank:	
Detailed Description:	2004: 1 adult male, 1 adult female, 8 immature, sex unknown. 2003: 1 adult male, 1 adult female (Obs_id 758).
General Area:	2004: Terrestrial - Grassland / Field (Obs_id 2438).
General Comments:	2004: It appears only a single pair used the airport in 2004. On June 23, two adults were seen with 5 juveniles, indicating locally produced young. On July 21, at least 8, and possibly 10, juveniles were observed, suggesting two broods for one pair (Obs_id 2438).
Management Comments:	

Location

Survey Site Name:	Concord Airport		
Managed By:	Airport Bluff + Floodplain		
County:	Merrimack	USGS quad(s):	Concord (4307125)
Town(s):	Concord	Lat, Long:	431207N, 0713004W
Size:	288.6 acres	Elevation:	

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions:

Dates documented

First reported:	2003-05-22	Last reported:	2004-08-03

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Vesper Sparrow (*Pooecetes gramineus*)

Legal Status

Federal: Not listed
State: Not listed

Conservation Status

Global: Demonstrably widespread, abundant, and secure
State: Not ranked (need more information)

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 2004: 7 adult males, 2 adult females. How observed: heard, seen (Obs_id 2439). 2003: 1 adult male (Obs_id 761). 2 adult males (Obs_id 760). 3 adult males, 1 adult female (Obs_id 762). 2 adult males (Obs_id 759). 2002: 14 adult males heard (6/3-7/24). (Obs_id 161). 2001: 8 adult, sex unknowns (Obs_id 1175).

General Area: 2004, 2003, 2002, 2001: Terrestrial - Grassland / Field (Obs_id 161, 761, 760, 762, 759, 1175).

General Comments: 2004: At least six, and possibly up to 8, male Vesper Sparrows held territories here in 2004. Females were rarely seen, but on one occasion an adult bird was seen carrying food, clearly indicating the presence of nestlings or fledglings (Obs_id 2439). 2003: Single male heard on three dates (middle date = 6 June) (Obs_id 761). 2003: Two territorial males (Obs_id 760). 2003: Three territorial males (and at least one pair) in area around southern end of airport: one pair on southern-most grassy island, 2nd directly east in wide grassy area east of runway, and third at southeast corner of runway (Obs_id 762). 2003: Two territorial males (Obs_id 759). 2002: This number of males is an estimate based on the distribution of both seen and heard birds over the range of dates indicated. Many of the individuals were only detected once during the season, but nonetheless probably represent males with established ter[ritories (truncated)].

Management Comments:

Location

Survey Site Name: Concord Airport
Managed By: Airport Bluff + Floodplain

County: Merrimack
Town(s): Concord
Size: 288.2 acres

USGS quad(s): Concord (4307125)
Lat, Long: 431207N, 0713004W
Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2003: Concord airport - eastern runway intersection (Obs_id 761). Central area of Concord airport (either side of southern runway intersection) (Obs_id 760). Southern end of Concord airport (Obs_id 762). Northern end of Concord airport (Obs_id 759). 2002: Concord Airport (Obs_id 161). 2001: Concord Airport (Obs_id 1175).

Dates documented

First reported: 2001-06-09 Last reported: 2004-08-03

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

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ORIGINAL

April 14, 2008

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000

Dear Ms. Bose:

Tennessee Gas Pipeline Company ("Tennessee") submits herewith an original and seven copies of its responses to the Federal Energy Regulatory Commission's Environmental Information Request dated March 28, 2008.

A copy of this letter is being served on all parties of record.

Respectfully submitted,

TENNESSEE GAS PIPELINE COMPANY

By _____

Jay V. Allen
Senior Counsel
(713) 420-5589
(713) 420-1601 (fax)

c: Mr. David Hanobic (FERC Staff)
all parties (w/o attachments)

Tennessee Gas Pipeline
1001 Louisiana Street Houston, Texas 77002
PO Box 2511 Houston, Texas 77252 2511
tel 713 420 2131

State of Texas §

§

County of Harris §

AFFIDAVIT

I, Charles Malcolm, being first duly sworn, hereby state that I am a Principal Engineer, and on behalf of Tennessee Gas Pipeline Company, I have reviewed Response Nos. 1, 5, 7a, 18, and 19 of the Federal Energy Regulatory Commission's March 28, 2008, Environmental Information Request in Docket No. CP08-65-000, and such responses are true and correct to the best of my knowledge, information, and belief.

Charles Malcolm
Principal Engineer

Subscribed and sworn to before me this 11th day of April, 2008.

Notary Public
My commission expires: 12/4/08

State of Texas §

§

County of Harris §

AFFIDAVIT

I, Howdy McCracken, being first duly sworn, hereby state that I am a Principal Environmental Representative, and on behalf of Tennessee Gas Pipeline Company, I have reviewed Response Nos. 2, 3, 4, 6, 7b, 7c, 8, 10, 11, 12, and 13 of the Federal Energy Regulatory Commission's March 28, 2008, Environmental Information Request in Docket No. CP08-65-000, and such responses are true and correct to the best of my knowledge, information, and belief.

Howdy McCracken
Principal Environmental Representative

Subscribed and sworn to before me this 10th day of April, 2008.

Notary Public
My commission expires:

KAREN A. LEMELLE
MY COMMISSION EXPIRES
November 16, 2008

State of Texas §

§

County of Harris §

AFFIDAVIT

I, Brian A. Merchant, being first duly sworn, hereby state that I am Manager, Operations Planning, and on behalf of Tennessee Gas Pipeline Company, that I have reviewed the Data Response No. 9 to the Federal Energy Regulatory Commission's Information Request dated March 28, 2008, in Docket No. CP08-65-000, and that such response is true and correct to the best of my knowledge, information, and belief.

Brian A. Merchant
Manager, Operations Planning

Subscribed and sworn to before me this 4th day of April, 2008.

Notary Public
My commission expires: 12/4/08

State of Texas §

§

County of Harris §

AFFIDAVIT

I, Mai-Trinh Tran, being first duly sworn, hereby state that I am a Principal Engineer, and on behalf of Tennessee Gas Pipeline Company, I have reviewed Response Nos. 14, 15, 16, and 17 of the Federal Energy Regulatory Commission's February 21, 2008, Environmental Information Request in Docket No. CP08-65-000, and such responses are true and correct to the best of my knowledge, information, and belief.

KAREN A. LEMELLE
MY COMMISSION EXPIRES
November 16, 2008

Mai-Trinh Tran
Principal Engineer

Subscribed and sworn to before me this 10th day of April, 2008.

Notary Public
My commission expires:

Tennessee Gas Pipeline Company
Concord Expansion Project
Docket No. CP08-65-000
March 28, 2008

ENVIRONMENTAL INFORMATION REQUEST

Data Request No. 1:

Resource Report 1 identifies two additional temporary workspaces associated with the proposed access road. Please clarify if these workspaces are included in the 2.6 acres that would be disturbed during construction? If not please update all tables accordingly.

Data Response No. 1:

The two additional temporary workspaces associated with the proposed access road identified in Resource Report 1 are included in the 2.6 acres that would be disturbed during construction.

Respondent: Charlie Malcolm
Title: Principal Engineer

Tennessee Gas Pipeline Company
Concord Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 2:

Please update the status of Table 1-4 in Resource Report 1.

Data Response No. 2:

TABLE 1-4
PERMITS, LICENSES, APPROVALS, AND CERTIFICATES REQUIRED FOR CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE CONCORD EXPANSION PROJECT

Permit/Approval	Administering Agency	Date Submitted	Status
Federal			
Certificate of Public Convenience and Necessity	Federal Energy Regulatory Commission	Filed January 2008	In-progress
Title V Federal Air Regulations [Clean Air Act – 1990 et. seq.]	U.S. Environmental Protection Agency	Not required	Minor source not subject to federal Title V regulations
Endangered Species Section 7 Consultation [Endangered Species Act – 16 U.S.C.1531 et. seq.]	U.S. Fish and Wildlife Service	October 25, 2007 (compressor station) December 7, 2007 (meter station)	No federally-listed threatened or endangered species present at either location per clearance letters received 11/30/07, and 1/07/08.
Hydrostatic Test Water Discharge Authorization	U.S. Environmental Protection Agency	To be filed in April / May 2008	30-day review period after submittal

TABLE 1-4
PERMITS, LICENSES, APPROVALS, AND CERTIFICATES REQUIRED FOR CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE CONCORD EXPANSION PROJECT

Permit/Approval	Administering Agency	Date Submitted	Status
Cultural Resources Review under Section 106 of the National Historic Preservation Act	NH Historic Preservation Office	12/17/07 and 1/7/08 for the compressor station. 12/18/07 for the meter station	Clearance issued for compressor site based on the 3/20/07 summary memorandum and the 1/24/08 architectural concurrence. Clearance issued for meter station via 1/23/08 concurrence.
State			
No Permit / Approval Required	NH Site Evaluation Committee	To be filed April 2008	NH EFSEC serves as the lead coordinating agency for all state and local permits / approvals
Temporary Permit	NHDES Air Resources	1/28/08	Review in progress
State Operating Permit	NHDES Air Resources	Will submit at least 90 days prior to expiration of temporary permit	Pending issuance of temporary permit

TABLE 1-4
PERMITS, LICENSES, APPROVALS, AND CERTIFICATES REQUIRED FOR CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE CONCORD EXPANSION PROJECT

Permit/Approval	Administering Agency	Date Submitted	Status
Threatened & Endangered Species Clearance	NH Natural Heritage Bureau/ NH Fish and Game Department	October 25, 2007 (compressor station) December 7, 2007 (meter station)	Consultation complete. Brook Floater identified in Beaver Brook/Soucook River – no associated Project-related impact
Site Specific - Alteration of Terrain Permit	NHDES Alteration of Terrain Program	To be filed under EFSEC Process	Filing pending

Respondent: Howdy McCracken
Title: Principal Environmental Representative

Tennessee Gas Pipeline Company
Concord Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 3:

Please include a discussion of Cumulative Impacts of the proposed project. This discussion should address past, present, and reasonably foreseeable actions in the project area, including: current and projected area development (e.g., oil and gas); management activities and authorizations on public lands (e.g., range conservation and forestry programs); land use trends; and applicable industrial/infrastructure components (e.g., utility corridors).

Data Response No. 3

Cumulative impacts associated with the Project would result from the additive or interactive effect of the construction and operation of the Project facilities with other non-Project related activities occurring at the same time in the vicinity of the pipeline alignment. To evaluate the potential cumulative impacts, Tennessee assessed prior, current, and foreseeable future projects or human-related activities near the Project facilities. Focus was placed upon the resources identified within the environmental report such as land use, socio-economics, soils, and vegetation that would be adversely affected by cumulative impacts. The Project will not directly impact cultural resources, wetlands and waterbodies, federal or state-listed endangered or threatened species, or geologic resources and therefore will not contribute to potential cumulative impacts on these resources.

Land Use

The construction and operation of the pipeline replacement will have a minor effect on existing and future land use. The subject property is currently undeveloped and is situated in an industrial zoned area. The construction and operation of a compressor station within this site will not limit surrounding land use in terms of agriculture, residential development, or recreation. Tennessee is not aware of any future plans for new development or significant construction projects within 0.25 miles of the Project alignment that could contribute to cumulative impacts on land use (e.g., such as additional clearing of mature forest, increase in traffic on area roadways, or adverse effects on agricultural land). The Project will be constructed in accordance with the FERC Plan. Because Tennessee is the owner of the property, there will be no other directly affected landowners. Based on this information, the potential cumulative impacts of the Project on land use will be negligible.

Socio-Economics

The Project will have temporary, minor impacts to existing municipal services during construction. However, it will result in a net benefit to the town of Pelham through the increased tax base associated with the operation of a compressor station within the property. Other short-term impacts may include increased traffic on roadways within the vicinity of the Project. This increase will occur only during the construction period. Tennessee is not aware of any other projects or developments within the Project area that may increase the overall socio-economic

impact to the town of Pelham. Therefore, the Project should not negatively contribute to cumulative impacts on socio-economics.

Soils

The soil resource impacts will occur only during the construction period and/or post-construction monitoring period. Depending on soil conditions, these impacts can include loss of excavated soil from water and wind erosion and soil compaction from construction equipment. The likelihood of cumulative impacts on soils is minimal and would be associated with development or construction activities directly associated with site grading in advance of the compressor station construction activities. Tennessee will implement the FERC Plan to ensure that soil erosion is minimized and will restore and revegetate all temporary workspace areas upon completion of construction. Tennessee is unaware of any proposed or future activities with the potential to result in cumulative impacts on soils. Therefore, the Project should not contribute to cumulative impacts on soils.

Vegetation

Long-term impacts to vegetation are limited to the clearing of upland forest within the compressor station workspace. The siting of the station has been done in a manner to preserve a significant buffer of mature trees between the station and surrounding properties to the north, east, and south. Temporary workspace outside of the fenced station compound that was identified as forest during the field surveys will be allowed to revert to forest except for a ten-foot safety buffer around the perimeter fence. Areas that are already vegetated with grasses or early successional species will be restored after construction has been completed. The site is effectively isolated from other large tracts of undisturbed vegetation, therefore cumulative impacts to vegetation associated with large-scale construction or development projects would not occur. As previously stated, Tennessee is unaware of any significant development or construction projects being proposed in the vicinity of the Project site and does not anticipate that the construction and operation of the Project will contribute to cumulative impacts on vegetation.

Conclusion

The majority of the Project-related effects are temporary in nature. Therefore, the potential negative cumulative effects of the Project are negligible when combined with potential impacts associated with other previous, current, or reasonably foreseeable development or construction projects in the vicinity of the Project facilities.

Respondent: Howdy McCracken
Title: Principal Environmental Representative

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 4:

Please provide a copy of Tennessee's Stormwater Pollution Prevention Plan referenced in the application.

Data Response No. 4:

In June 2006, the U.S. EPA issued a rule exempting sediment discharges from natural gas production and transmission construction sites from regulation under the Clean Water Act and EPA's Storm Water regulations. Therefore, a Project-specific Stormwater Pollution Prevention Plan is not required, and Tennessee will use the FERC Plan as its basis for stormwater pollution prevention during construction. In addition, under the provisions of the NHDES Site-Specific Alteration of Terrain Permit application, Tennessee incorporated several stormwater management facilities into the Project design as required to ensure compliance with applicable state-regulation. Tennessee will supplement its filing with a copy of the Grading and Drainage Plan and accompanying stormwater report to be submitted to NHDES once the documents are completed.

Respondent: Howdy McCracken
Title: Principal Environmental Representative

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 5:

Would any hydrostatic testing of the piping upgrades take place at the Laconia Meter Station? If so, provide water source, amount, and discharge locations.

Data Response No. 5:

The fabrication of the piping upgrades at the Laconia Meter Station will be done using pre-tested piping. No hydrostatic testing will take place at the Laconia Meter Station.

Respondent: Charlie Malcolm
Title: Principal Engineer

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 6:

Provide any correspondence received from the United States Fish and Wildlife Service concerning the Laconia Meter Station upgrades and extra work space.

Data Response No. 6:

The correspondence from the United States Fish and Wildlife Service dated January 7, 2008, concerning the Laconia Meter Station upgrades and associated temporary workspace is included herein. This correspondence advised there were no federally-listed threatened or endangered species habitat within the vicinity of the Laconia Meter Station and further consultation was not required.

Respondent: Howdy McCracken
Title: Principal Environmental Representative

ENSR | AECOM

ENSR
[illegible] State Road Sagamore Beach Massachusetts [illegible]
T 508.888.3900 F 508.888.0685 www.ensr.aecom.com

December 7, 2007

Mr. Anthony Tur
Endangered Species Specialist
U.S. Fish and Wildlife Service
New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087

Re: Rare Species Information Request
Tennessee Gas Pipeline Company
Concord Expansion Project
Concord, NH

Dear Mr. Tur:

Tennessee Gas Pipeline Company ("Tennessee"), a subsidiary of El Paso Corporation and a major supplier of natural gas to utilities and power generators in the northeast, plans to modify its existing Laconia meter station in Concord, New Hampshire, as part of the Concord Expansion Project. The Project also includes construction of a new compressor station in Pelham, NH, which was the subject of previous correspondence on October 25, 2007. The project would benefit KeySpan's customers and New Hampshire citizens by providing incremental natural gas transportation in a safe and reliable manner.

Tennessee plans to conduct piping modifications to their existing Laconia meter station. The proposed modifications will be located entirely within the existing fenced meter station compound located off Broken Bridge Road in Concord, NH (see attached locus map).

An Environmental Report, required as part of the Federal Energy Regulatory Commission ("FERC") Section 7C application and National Environmental Policy Act ("NEPA") review process, is currently being prepared for the project. As part of the FERC NEPA review, it is necessary to identify the presence of any federally listed threatened or endangered species on or within 0.25-miles of the proposed meter station modifications to be located in Concord, New Hampshire.

Based on examination of the community lists for Concord, NH, it appears that only the Karner blue butterfly has the potential to be located within the review area. ENSR requests that the USFWS review its records relative to threatened and endangered species and provide written comments pertaining to the identified resources. Please find enclosed a USGS topographic locus map showing the project locus for your review. In all cases, ENSR will protect the confidential nature of any information received from the USFWS regarding the specific locations of threatened and endangered species. If you have any questions or comments regarding the proposed project, please feel free to contact me via phone at 508-888-3900 x 226 or email at jzimmer@ensr.aecom.com. Thank you for your consideration and assistance.

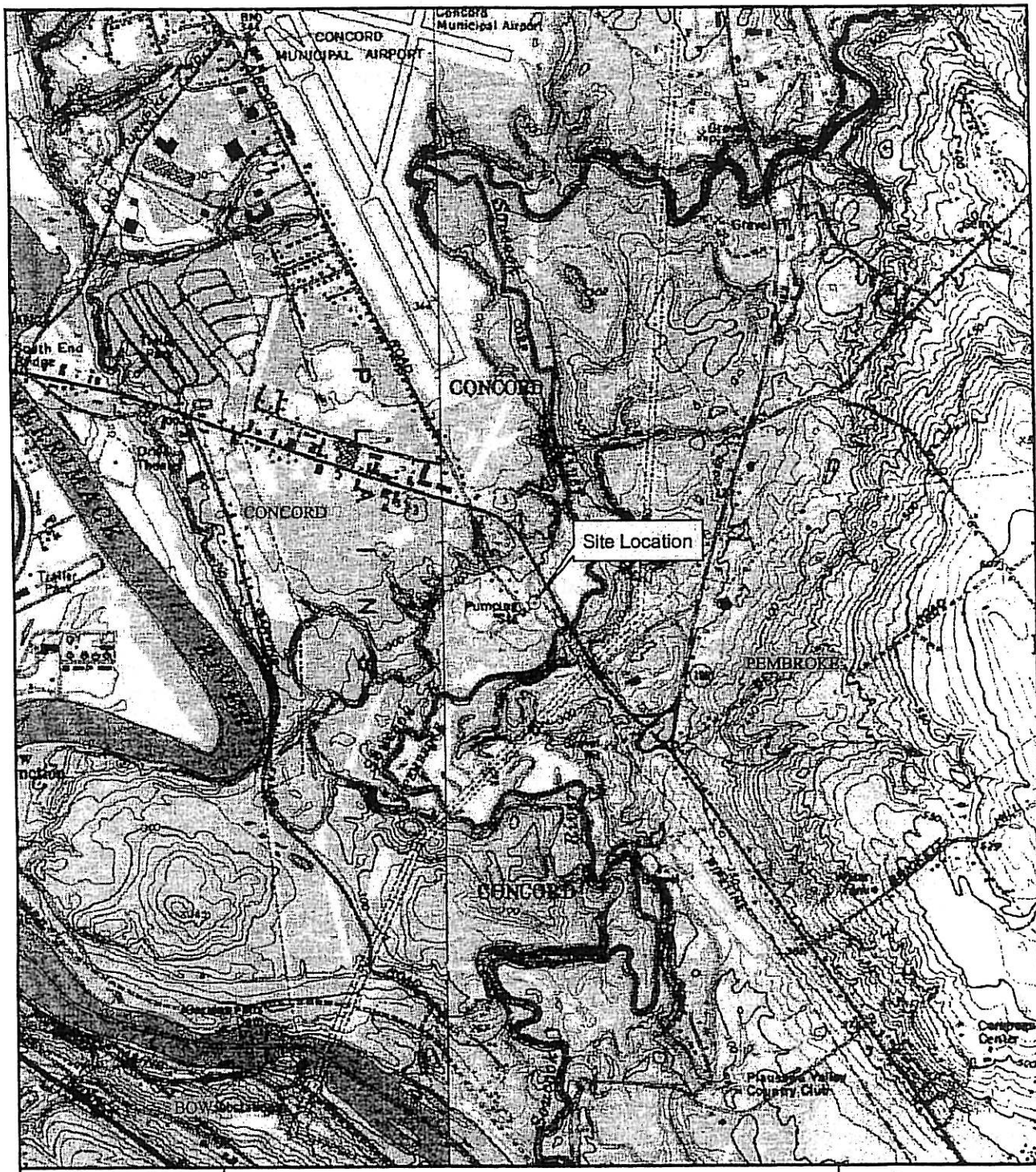
Sincerely,

ENSR Corporation

John Zimmer
Senior Project Manager

cc: Alicia Bishop - Tennessee

Attachment – USGS topographic quadrangle locus map



United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087

January 7, 2008

Reference:

Project	Location
Meter station modification	Concord, NH

John Zimmer
ENSR Corporation
95 State Road
Sagamore Beach, MA 02562-2415

Dear Mr. Zimmer:

This responds to your recent correspondence requesting information on the presence of federally-listed and/or proposed endangered or threatened species in relation to the proposed activity(ies) referenced above.

Based on information currently available to us, no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under Section 7 of the Endangered Species Act is not required.

This concludes our review of listed species and critical habitat in the project location(s) and environs referenced above. No further Endangered Species Act coordination of this type is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

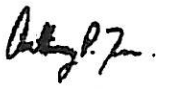
In order to curtail the need to contact this office in the future for updated lists of federally-listed or proposed threatened or endangered species and critical habitats, please visit the Endangered Species Consultation page on the New England Field Office's website:

www.fws.gov/northeast/newenglandfieldoffice/EndangeredSpec-Consultation.htm

In addition, there is a link to procedures that may allow you to conclude if habitat for a listed species is present in the project area. If no habitat exists, then no federally-listed species are present in the project area and there is no need to contact us for further consultation. If the above conclusion cannot be reached, further consultation with this office is advised. Information describing the nature and location of the proposed activity that should be provided to us for further informal consultation can be found at the above-referenced site.

Thank you for your coordination. Please contact us at 603-223-2541 if we can be of further assistance.

Sincerely yours,



Anthony P. Tur
Endangered Species Specialist
New England Field Office

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

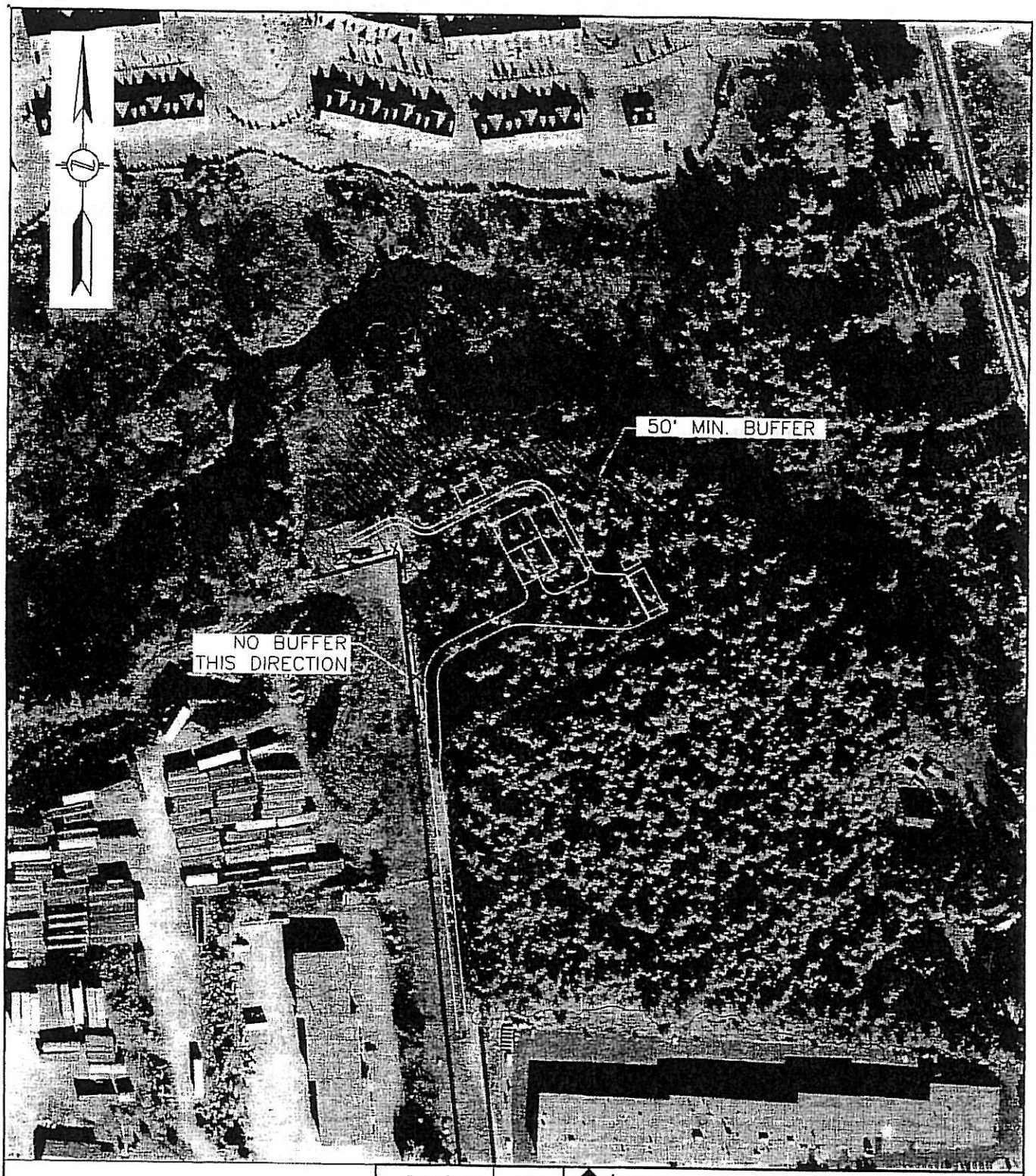
Data Request No. 7a:

Regarding Tennessee's proposed Pelham compressor station,
What is the width of tree buffer that would be maintained at the Compressor Station? Please provide a figure showing the tree buffer that would be left intact.

Data Response No. 7a:

On Tennessee's property, the width of the tree buffer that will be maintained to the north of the compressor station will be at a minimum fifty feet wide equating to approximately 0.84 acres. Extending beyond the tree buffer to Tennessee's property line, which ends at the southern edge of the creek, is a wetlands area. Off of Tennessee's property continuing from the northern edge of the creek to the Whispering Winds Condominiums, is approximately 2.504 acres of vegetated area. These areas are depicted on the drawing filed herewith.

Respondent: Charlie Malcolm
Title: Principal Engineer



TREE LINE

FENCE LINE

TEMPORARY WORKSPACE

NO	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
1	04/09	HT	ISSUED FOR E		

REVISIONS

ENG. RECORD		DATE
DRAWN BY:	HT	04/04
DRAWING APPROVAL		
PROJECT APPROVAL		
SURVEY DATE:		
SCALE: 1"=200'		
PROJECT ID: 122713		
FILE NAME: TAE14270B10022A		

Tennessee Gas Pipeline
an El Paso company

TREELINE BUFFER AREA
COMPRESSOR STATION 270B
CONCORD EXPANSION PROJECT
HILLSBOROUGH COUNTY, NEW HAMPSHIRE

DWG. NO. TA-E14-270B-100-22A

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 7b:

If the tree buffer is comprised of deciduous trees, how would Tennessee reduce the visual impacts that would change seasonally?

Data Response No. 7b:

The majority of the mature tree buffer is comprised of white pine (*Pinus strobus*), with lesser densities of white oak (*Quercus alba*) and Eastern hemlock (*Tsuga canadensis*). Because the dominant tree species is coniferous, Tennessee does not anticipate a significant difference in the visual impacts of the Project on a seasonal basis. To further decrease the potential visual impact associated with the Project, Tennessee is willing to install additional coniferous plantings around the perimeter fence to provide additional screening where possible and still avoid work in the wetlands fifty foot buffer zone. These plantings will have a growth limitation of fifteen to twenty feet to prevent associated operational safety concerns.

Respondent: Howdy McCracken
Title: Principal Environmental Representative

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 7c:

What additional landscaping does Tennessee propose for the compressor station after construction is finished to minimize visual impacts, especially to the Whispering Winds Community?

Data Response No. 7c:

Please refer to Response No. 7b for a description of Tennessee's proposed additional landscaping to minimize visual impacts associated with the Project.

Respondent: Howdy McCracken
Title: Principal Environmental Representative

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 8:

Regarding the compressor station alternative sites identified in Resource Report 10, please provide a table comparing the resources impacted by Alternative Sites 1 and 2 to the proposed site.

Data Response No. 8:

The alternative sites were not formally surveyed in the field to determine the presence / absence and extent of environmental and cultural resources within each property. As stated in Resource Report 10, Alternative Site 1 was not of sufficient size for the proposed facilities and is located in a higher-density residential area. Alternative Site 2, while of sufficient size, is located within a commercial district instead of an industrial district, was cost prohibitive to purchase, and would have rendered the Project unviable. All representations within the table below are based upon desktop surveys using currently available mapping and GIS data.

COMPARISON MATRIX PELHAM SITE AND ALTERNATIVES 1 AND 2				
Environmental Factor	**Unit**	**Pelham Site**	**Alternative 1**	**Alternative 2**
Directly Affected Landowners	Number	0	1	1
Public / Private Water Wells	Number Within 150 Feet of Work Area	0	Unknown	Unknown
Public Water Supplies	Number Within 400 Feet of Work Area	0	0	2
Local Aquifer Protection Zone	Present / Absent	Absent	Absent	Absent
Aquifers	Present / Absent	Present	Absent	Absent
NWI Wetlands	Present / Absent	Present (Outside of Construction Workspace)	Absent	Present
Rare Species Habitat	Present / Absent	Absent	Unknown	Unknown

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

COMPARISON MATRIX PELHAM SITE AND ALTERNATIVES 1 AND 2				
Environmental Factor	**Unit**	**Pelham Site**	**Alternative 1**	**Alternative 2**
Threatened & Endangered Species	Potential Number of T&E Plant Species Present	Clearance Received October 2007	31	7
Threatened & Endangered Species	Potential Number of T&E Wildlife Species Present	Clearance Received October 2007	2	3
Cultural Resources	Number of Identified Sites Potentially Affected by Construction	0	Unknown	Unknown
Forest Land Affected by Construction	Acres Cleared	1.7	3.5	
Predominant Land Cover	Type	Coniferous Forest	Coniferous Forest	Coniferous Forest
Agricultural Land / Soil	Acres Affected	0	0	0.95
Floodplains	Present / Absent	Present (Outside of Construction Workspace)	Absent	Absent
Hydric Soils	Present / Absent	Present (Outside of Construction Workspace)	Present	Present
Conservation Land	Present / Absent	Absent	Absent	Absent
Recreation Land	Present / Absent	Absent	Absent	Absent

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

COMPARISON MATRIX PELHAM SITE AND ALTERNATIVES 1 AND 2				
Environmental Factor	**Unit**	**Pelham Site**	**Alternative 1**	**Alternative 2**
Zoning	Type	Industrial	Residential District C	Commercial
Daycare Centers	Number Within One Mile Straight Line Distance	1	2	1
Municipal Schools	Number Within One Mile Straight Line Distance	0	0	0
Churches	Number Within One Mile Straight Line Distance	0	0	3
Residences	Number of Structures within 0.25 miles	17 Homes 16 Condominiums	42 Homes 17 Condominiums	43 Homes 3 Condominiums

*The Pelham site and Alternative 1 site are both located within 0.25 miles of the same condominium complex.

Respondent: Howdy McCracken
Title: Principal Environmental Representative

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 9

The proposed location for Tennessee's Pelham Compressor Station is about 9.45 miles downstream of Tennessee's existing interconnect with M&NE in Dracut, Massachusetts. As proposed, the Exhibit G shows the Pelham Compressor Station is utilizing about 83 percent of the available horsepower of compression under design conditions. Provide an analysis of alternative locations for the Pelham Compressor Station on Tennessee's Line 200 which reflect the maximum distance, both upstream and downstream of the currently proposed location. Tennessee's analysis of moving the Pelham Compressor Station should account for the requested 30,000 Dth/d of incremental transportation capacity to Energy North from the receipt point at Dracut, Massachusetts to the Laconia Meter Station in Concord, New Hampshire. Discuss the viability of each result and provide additional facilities and/or modifications and estimated costs, if necessary, that would be required for each alternative site. Provide all data sets for each hydraulic study conducted by Tennessee to support its response. File the electronic data sets for each hydraulic study conducted by Tennessee with the Commission on CD or DVD.

Data Response No. 9:

As discussed in Resource Report 10 (Section 10.4 – Site Alternatives), Tennessee reviewed approximately 3.5 miles to the south and five miles to the north from MLV 270B1-104 to identify potential sites for the new compressor station. The preferred site located in Pelham, New Hampshire, is located approximately 0.5 miles to the south (upstream) of MLV 270B1-104. Using the preferred Pelham site as the point of reference, the maximum distance the compressor station can be moved upstream is approximately three miles, while the maximum distance the compressor station can be moved downstream of the Pelham site is approximately 5.5 miles.

Maximum Distance Upstream of the Pelham Site (~ 3 miles)

Upstream Site Design Conditions:

- Unit Suction Pressure – 523 psig
- Unit Discharge Pressure – 755 psig
- Suction Gas Temperature - 46.1 degrees F
- Throughput – 233.061 mmscfd
- Fuel – .934 mmscfd
- Hp Required – 4,495 Hp
- Hp Proposed - 6,130 Hp (one Solar Centaur 50L unit)

Pro(s) – reduction in fuel burn; no change in facilities required.
Con(s) – cost and availability of land; site located adjacent to little league baseball fields and residential homes.

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Maximum Distance Downstream of the Pelham Site (~ 5.5 miles)

Downstream Site Design Conditions:

- Unit Suction Pressure – 444 psig
- Unit Discharge Pressure – 707 psig
- Suction Gas Temperature - 37 degrees F
- Throughput – 221.505 mmscfd
- Fuel – 1.125 mmscfd
- Hp Required – 5417 Hp
- Hp Proposed - 6,130 Hp (one Solar Centaur 50L unit)

Pro(s) – no change in facilities required.
Con(s) – increase in fuel burn; cost and availability of land; site located in residential area; site located near wetlands.

After Tennessee's extensive search for a compressor site within the boundaries identified by the hydraulic studies, the Pelham site was determined to be the best location for the compressor station. This site met most, if not all, of the criteria set forth when identifying potential compressor sites: location in a primarily industrial area, cost, facility and workspace requirements, site elevation, road access, and length of interconnecting pipe between the new facility and Tennessee's existing pipeline.

Hydraulic models are on the accompanying compact disc, which is filed under separate cover and designated as "Critical Energy Infrastructure Information ("CEII")," pursuant to Parts 380 and 388 of Title 18 of the *Code of Federal Regulations*.

Respondent: Brian Merchant
Title: Manager, Operations Planning

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

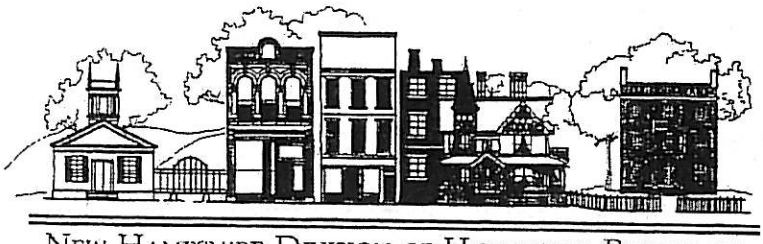
Data Request No. 10:

Please provide the New Hampshire State Historic Preservation Office's (SHPO) comments on 1) the January 2008 Phase 1 Archaeological Investigation Technical Report, 2) the January 21, 2008 Architectural Technical Memorandum, and 3) Public Archaeology Laboratory, Incorporated's (PAL) December 18, 2007 correspondence to the SHPO for the Laconia Meter Station.

Data Response No. 10:

Please see attached (1) the New Hampshire SHPO's comments dated March 20, 2008, on the January 2008 Phase 1 Archaeological Investigation Technical Report; (2) the December 5, 2007, Architectural Technical Memorandum with the SHPO concurrence stamp dated January 23, 2008; and (3) PAL's December 18, 2007, correspondence regarding the Laconia Meter Station with the SHPO concurrence stamp dated January 24, 2008.

Respondent: Howdy McCracken
Title: Principal Environmental Representative



NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES
State of New Hampshire, Department of Cultural Resources
19 Pillsbury Street, Concord, NH 03301-3570
TDD Access: Relay NH 1-800-735-2964
www.nh.gov/nhdhr
603-271-3483
603-271-3558
FAX 603-271-3433
preservation@dcr.nh.gov

March 20, 2008

Gregory R. Dubell
210 Lonsdale Avenue
Pawtucket, RI 02860

Re: Project Report Review for Tennessee Gas Pipeline Company, Concord Expansion Project; Pelham, NH. *Phase I Archaeological Investigation; Tennessee Gas Pipeline, Concord Expansion Project, Pelham and Concord, New Hampshire.*
Prepared by Nichole A. Gillis and Dianna L. Doucette, Public Archaeology Laboratory

Dear Mr. Dubell:

Thank you for providing the above mentioned report for review and comment. The Division of Historical Resources (Division) is in receipt of your request for review for the report submitted prepared by Nichole A. Gillis and Dianna L. Doucette of Public Archaeology Laboratory. The Division concurs with the recommendations and finds the report acceptable as written.

In accordance with the National Historic Preservation Act of 1966 (P.L. 89-655), as amended, and as implemented by regulations of the Federal Advisory Council on Historic Preservation ("36 CFR Part 800: Protection of Historic Properties"), the New Hampshire Division of Historical Resources/State Historic Preservation Office has reviewed the undertaking referenced above to identify potential effects on properties listed, or potentially eligible for listing, in the National Register of Historic Places.

Based upon the information provided in the above cited report, it has been determined that there are no known properties of architectural, historical, archaeological, engineering, or cultural significance within the area of the undertaking's potential impact and no further identification or evaluative studies are recommended.

If any other resources are discovered or affected as a result of project planning or implementation, the Division of Historical Resources is to be consulted on the need for appropriate evaluative studies, determinations of National Register eligibility, and mitigative measures (redesign, resource protection, or data recovery) as required by federal law and regulations.

For the purpose of compliance with the Advisory Council on Historic Preservation procedures (36 CFR 800), I request that this determination be construed as a finding of "No Historic Properties Affected".

Sincerely,

Elizabeth H. Muzzey
Director and State Historic Preservation Officer

EM:tk

Cc: FERC
Pelham Planning Board
Concord Planning Board

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December 5, 2007

Edna Feighner
Archaeologist & Review and Compliance Coordinator
New Hampshire Division of Historical Resources
19 Pillsbury Street, 2nd Floor
Concord, New Hampshire 03301

Re: Tennessee Gas Pipeline Company
Concord Expansion Project, Pelham, NH
Historic Architectural Properties Reconnaissance Survey
PAL #2090

DEC 12 2007
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Dear Ms. Feighner:

On behalf of Tennessee Gas Pipeline Company ("Tennessee"), enclosed please find the technical memorandum entitled, *Summary Report, TGP Concord Expansion Project, Pelham and Windham, New Hampshire, Historic Architectural Reconnaissance Survey*, for your review and comment. You will be receiving the official FERC filing in January 2008 including Resource Report 4 with this technical memorandum as an Appendix.

If you have any questions or require any additional information, please do not hesitate to contact Gregory R. Dubell, Energy Projects Manager, or me at your convenience. We appreciate your time and attention to this matter.

Sincerely,

Stephen A. Olausen
Senior Architectural Historian
Executive Director

/dg

Enclosure

cc: John Zimmer, ENSR (w/encl.)

Conditions required for NEPA & Section 106 of the NHPA have been met.
__X__ No Known Historic Resources
_____ No Resources Present
_____ No Adverse Effect
If plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation.

EJ Murray 1/23/08
NH State Historic Preservation Officer

210 Lonsdale Avenue
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t 401.728.8780
f 401.728.8784

PAL

December 18, 2007

Edna Feighner
Archaeologist & Review and Compliance Coordinator
New Hampshire Division of Historical Resources
19 Pillsbury Street, 2nd Floor
Concord, New Hampshire 03301

Re: Tennessee Gas Pipeline Company
Concord Expansion Project, Pelham, NH
PAL #2090

Dear Ms. Feighner:

Tennessee Gas Pipeline Company ("Tennessee") is proposing to modify existing piping at the Laconia Meter Station in Laconia, New Hampshire (see USGS locus map enclosed) as part of the Concord Expansion Project. The proposed modifications to the existing meter station are to process the additional gas volume generated by the Concord Compressor Station. All of the piping work will be located within the existing, fenced meter station compound. There will be no expansion of the facility footprint.

Due to the nature of the modifications at this existing facility, we are recommending that the Laconia Meter Station portion of the Concord Expansion Project will have no effect on historic properties.

With this letter we request your concurrence with this recommendation. If you have any questions or require any additional information, please do not hesitate to contact Gregory R. Dubell, Energy Projects Manager, or me at your convenience. We appreciate your time and attention to this matter.

Sincerely,

Deborah C. Cox, RPA
President

/dg

Enclosure

cc: John Zimmer, ENSR (w/o encl.)

Conditions required for NEPA & Section 106 of the NHPA have been met.
_____ Concur
_____ No Resources Present
_____ No Adverse Effect
If plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation.

1/24/08
NH State Historic Preservation Officer

210 Lonsdale Avenue
Pawtucket, RI 02860
tel 401.728.8780
fax 401.728.8784

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 11:

Resource Report 1 identifies a proposed 0.3 acre temporary extra work space south (outside) of the Laconia Meter Station. This was not included in PAL's December 18, 2007 correspondence, or the archaeological technical report. Consult the SHPO regarding the need for survey of this parcel. Provide the SHPO's comments, any report, and the SHPO's comments on the report. All material filed with the Commission containing **location, character, and ownership** information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: **"CONTAINS PRIVILEGED INFORMATION--DO NOT RELEASE."**

Data Response No. 11:

On April 4, 2008, PAL submitted correspondence (attached) to the New Hampshire SHPO requesting concurrence that construction of the 0.3 acre additional temporary workspace to the south (outside) of the Laconia Meter Station will have no effect on historic properties. Tennessee will supplement its filing with SHPO comments on the Laconia Meter Station extra workspace when that correspondence is received.

Respondent: Howdy McCracken
Title: Principal Environmental Representative

April 4, 2008

Edna Feighner
Archaeologist & Review and Compliance Coordinator
New Hampshire Division of Historical Resources
19 Pillsbury Street, 2nd Floor
Concord, New Hampshire 03301

Re: Tennessee Gas Pipeline Company
Concord Expansion Project, Pelham and Concord, NH
Laconia Meter Station – Additional Temporary Workspace
FERC Docket #CP08-65-000; PAL #2090

Dear Ms. Feighner:

As you are aware, Tennessee Gas Pipeline Company (Tennessee) is proposing to modify its existing Laconia Meter Station in Concord, New Hampshire (Figures 1 and 2), as part of the Concord Expansion Project (Project). The Public Archaeology Laboratory, Inc. (PAL) has been in correspondence with your office since 2007 regarding this Project. This request specifically addresses an additional temporary workspace, not previously identified in previous correspondence.

In support of the modifications associated with the Laconia Meter Station, Tennessee will require additional space to utilize as a staging area for equipment and materials associated with the Project (Figure 3). Tennessee does not anticipate the need to clear additional areas which may presently be vegetated and peripheral to the existing facility.

PAL staff have reviewed Project materials and visited the proposed site to assess the potential for historic and archaeological resources to be present within the area of potential effect (APE). During the walkover inspection, the site was noted to have previously been subject to grading activities and possessed a high degree of disturbance (Figures 4 through 7). Based on the evidence presented during the field inspection, we recommend that this parcel has very low to no potential for historic or archaeological resources to be present. Therefore, no further survey is recommended.

With this letter, we are requesting your concurrence with this recommendation. If you have any questions or require any additional information, please do not hesitate to contact Dianna L. Doucette, Principal Investigator, or me at your convenience. We appreciate your time and attention to this matter.

Sincerely,

Gregory R. Dubell
Energy Projects Manager

Enclosures

cc: John Zimmer, ENSR (w/encl.)

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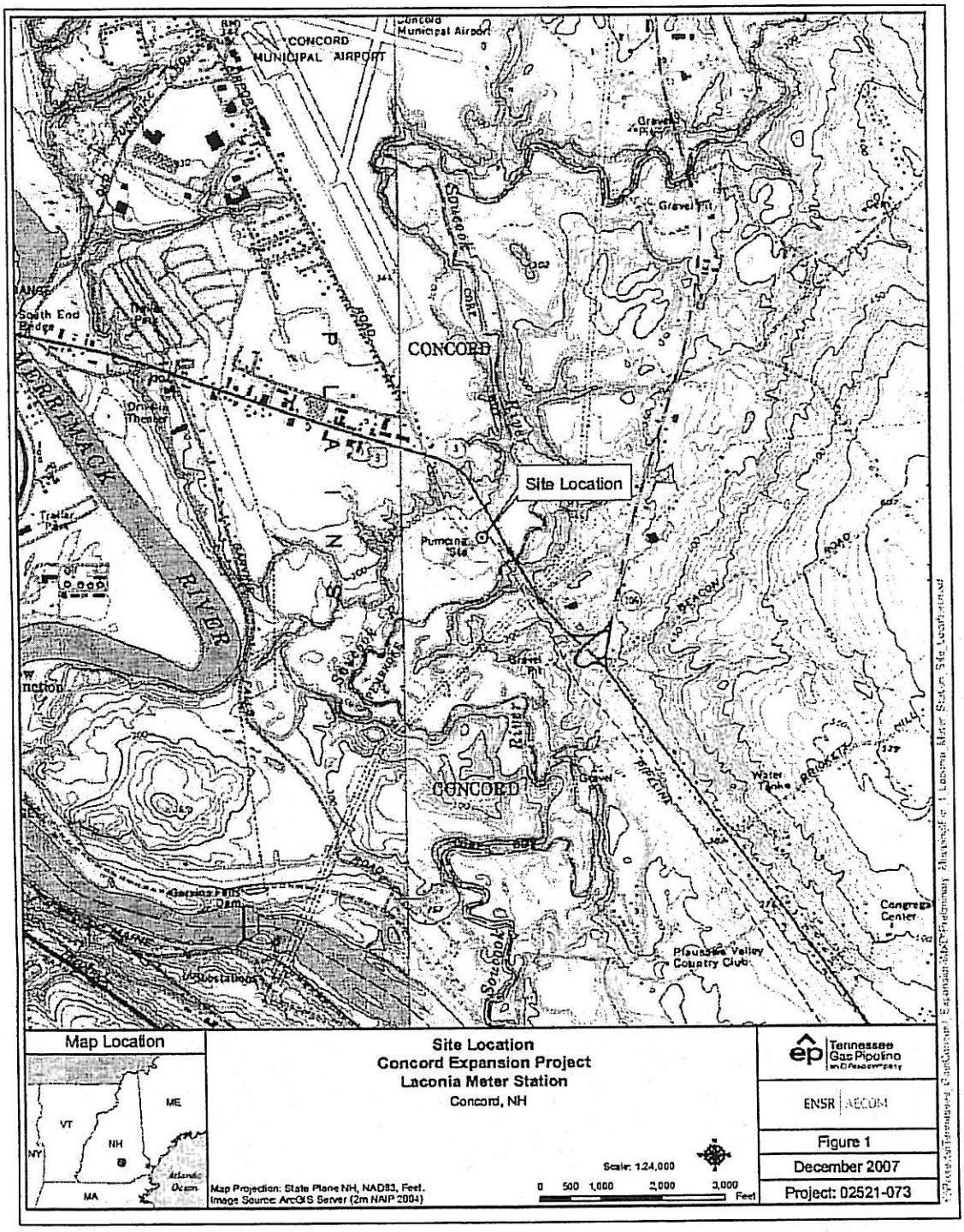

Figure 1. Location of existing Laconia Meter Station on the Concord NH, USGS topographic quadrangle, 7.5 minute series.

Figure 2. Aerial view of existing Laconia Meter Station depicting proposed additional temporary workspace.

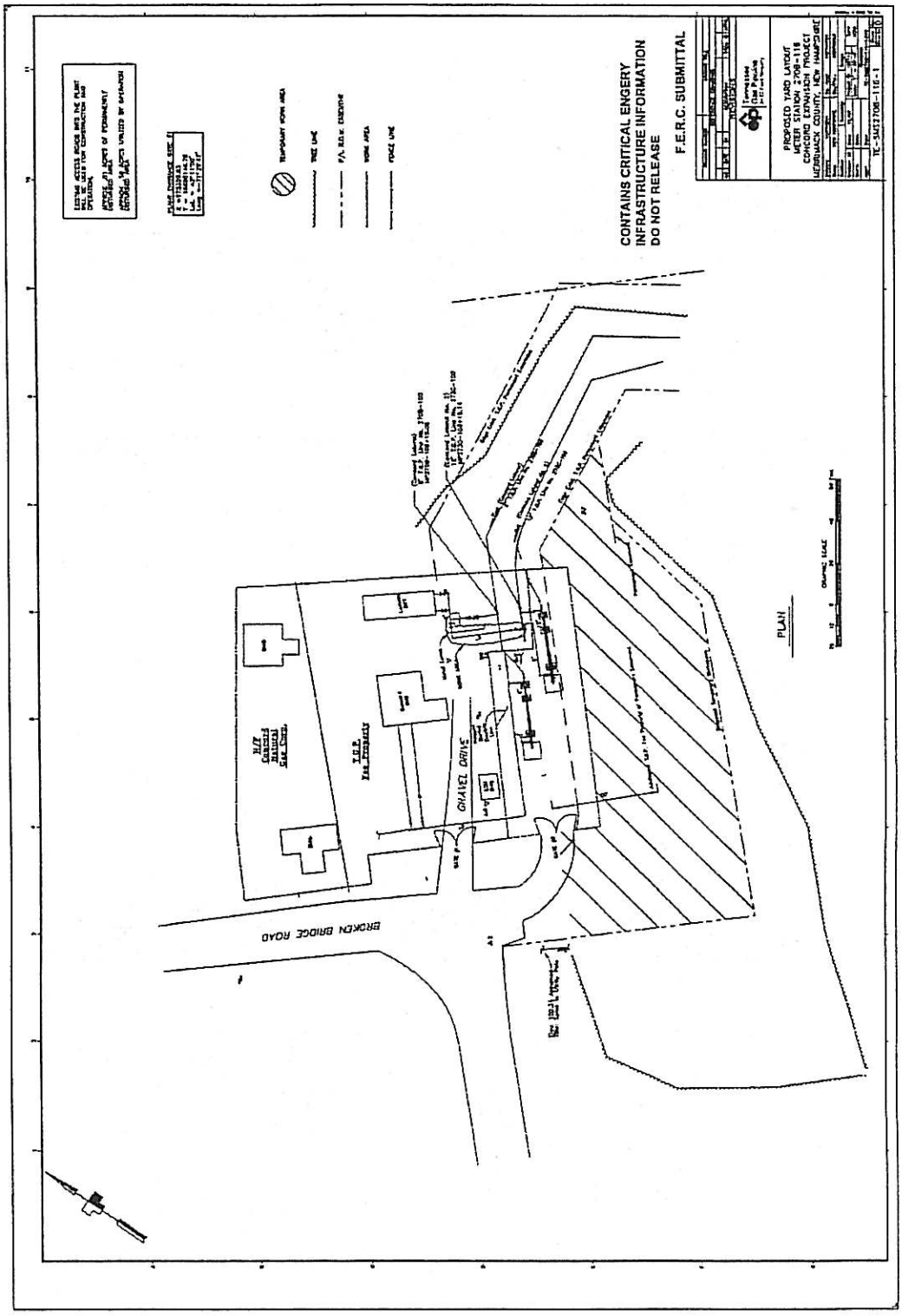

Figure 3. Proposed Conditions Plan (including additional temporary workspace location), Laconia Meter Station, Concord, NH.

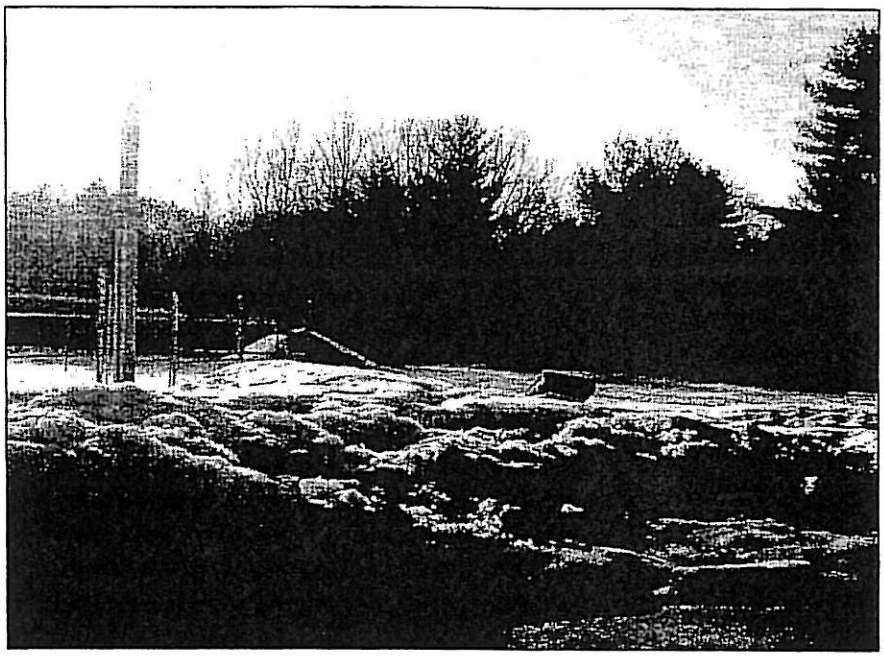

Figure 4. View of existing Laconia Meter Station fencing (left) and proposed additional temporary workspace from Broken Bridge Road, view facing southeast.

Figure 5. View of existing Laconia Meter Station (left) and proposed additional temporary workspace, view facing northeast (note push-pile in center of photograph).

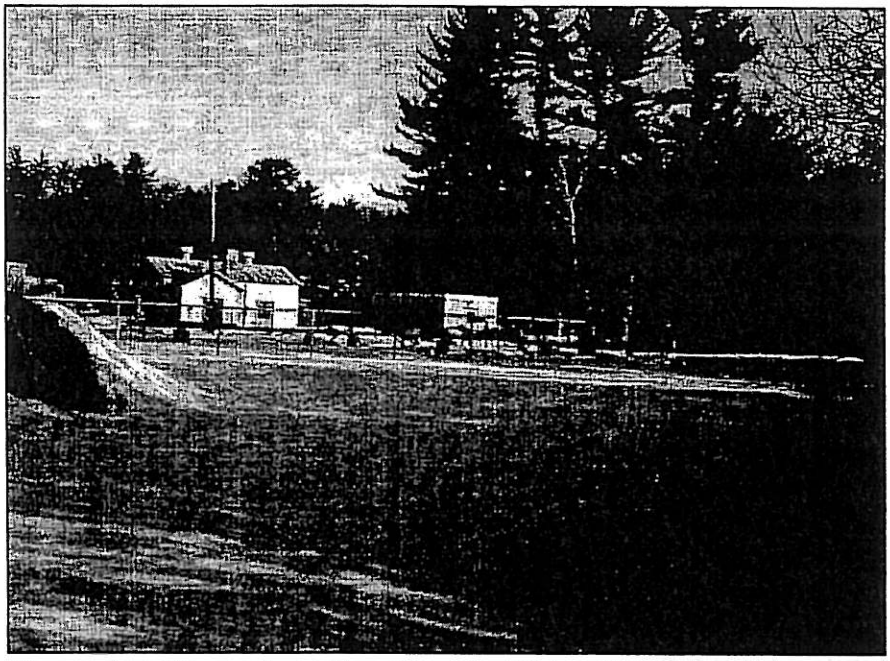

Figure 6. View of existing Laconia Meter Station and proposed additional temporary workspace (foreground), view facing northwest.

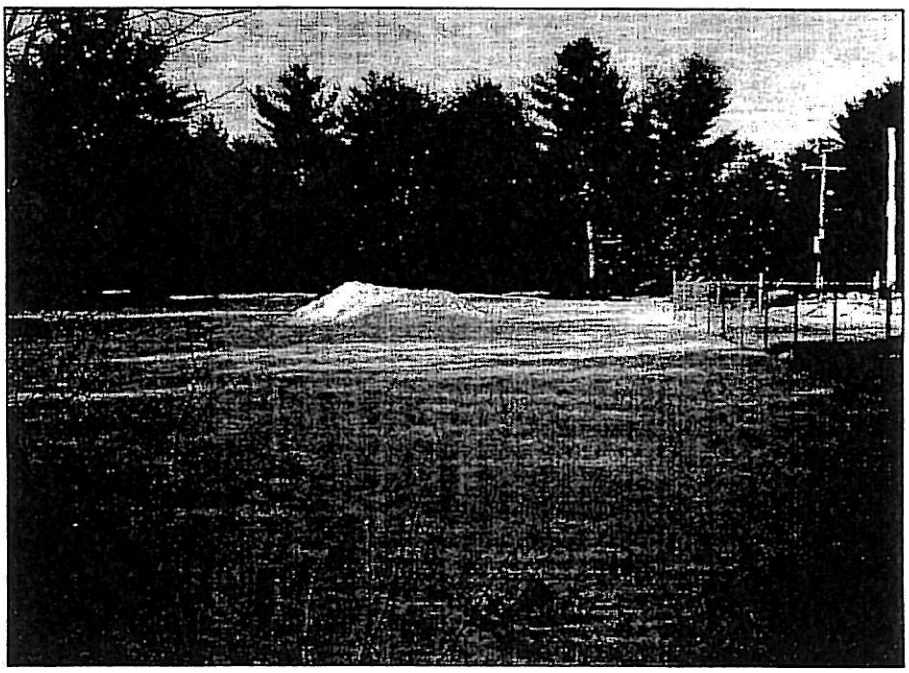

Figure 7. View of existing Laconia Meter Station fencing (right) and proposed additional temporary workspace, view facing southwest.

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 12:

Please provide any previously unfiled correspondence to and from the Native American groups contacted. In addition, PAL's October 30, 2007 letters do not identify the activities at the Laconia Meter Station. Please re-contact the Native American groups regarding this portion of the proposed project. Provide all correspondence.

Data Response No. 12

On April 3, 2008, PAL submitted correspondence regarding all project activities associated with the Laconia Meter Station to all six Native American groups contacted for the Project (see attached). No response has been received from any of the six Native American groups. Tennessee will supplement its filing with any correspondence from Native American tribes regarding the Laconia Meter Station when/if that correspondence is received.

Respondent: Howdy McCracken
Title: Principal Environmental Representative

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April 4, 2008

Chief Nancy Lyons Millette
Koasek Traditional Abenaki Nation
P.O. Box 42
Newbury, Vermont 05051

Re: Tennessee Gas Pipeline Company
Concord Lateral Expansion Project, Pelham and Concord, NH
FERC Docket #CP08-65-000; PAL #2090

Dear Chief Lyons Millette:

Tennessee Gas Pipeline Company (Tennessee) is proposing to modify existing piping at the Laconia Meter Station in Concord, New Hampshire (Figures 1 and 2) as part of the Concord Expansion Project. The Public Archaeology Laboratory, Inc. (PAL) has been in correspondence with the Koasek Traditional Abenaki Nation since October 2007 regarding this Project. This request specifically addresses the Laconia Meter Station and associated additional temporary workspace, not identified in previous correspondence.

The proposed modifications to the existing meter station are to process the additional gas volume generated by the Concord Compressor Station. In support of the modifications associated with the Laconia Meter Station, Tennessee will require additional space to utilize as a staging area for equipment and materials associated with the Project (Figure 3). Tennessee does not anticipate the need to clear additional areas which may presently be vegetated and peripheral to the existing facility.

PAL staff have reviewed Project materials and visited the proposed site to assess the potential for historic and archaeological resources to be present within the area of potential effect (APE). During the walkover inspection, the site was noted to have previously been subject to grading activities and possessed a high degree of disturbance (Figures 4 through 7). Based on the evidence presented during the field inspection, we recommend that this parcel has very low to no potential for historic or archaeological resources to be present. Therefore, no further survey is recommended.

On behalf of Tennessee, PAL looks forward to further consultation with the Koasek Traditional Abenaki Nation regarding the Concord Lateral Expansion Project. If you have questions about

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FAX 401.728.8784

the Project or concerns regarding any areas located along or near currently proposed Project facilities that may hold religious or cultural significance, please do not hesitate to contact Dianna L. Doucette, Principal Investigator, or me at your convenience.

Sincerely,

Gregory R. Dubell, RPA
Energy Projects Manager

/dg

Enclosure

cc: John Zimmer, ENSR (w/o encl.)

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April 4, 2008

Chief Charles True
Abenaki Nation of New Hampshire
262 Lancaster Road
Whitefield, New Hampshire 03598

Re: Tennessee Gas Pipeline Company
Concord Lateral Expansion Project, Pelham and Concord, NH
FERC Docket #CP08-65-000; PAL #2090

Dear Chief True:

Tennessee Gas Pipeline Company (Tennessee) is proposing to modify existing piping at the Laconia Meter Station in Concord, New Hampshire (Figures 1 and 2) as part of the Concord Expansion Project. The Public Archaeology Laboratory, Inc. (PAL) has been in correspondence with the Abenaki Nation of New Hampshire since October 2007 regarding this Project. This request specifically addresses the Laconia Meter Station and associated additional temporary workspace, not identified in previous correspondence.

The proposed modifications to the existing meter station are to process the additional gas volume generated by the Concord Compressor Station. In support of the modifications associated with the Laconia Meter Station, Tennessee will require additional space to utilize as a staging area for equipment and materials associated with the Project (Figure 3). Tennessee does not anticipate the need to clear additional areas which may presently be vegetated and peripheral to the existing facility.

PAL staff have reviewed Project materials and visited the proposed site to assess the potential for historic and archaeological resources to be present within the area of potential effect (APE). During the walkover inspection, the site was noted to have previously been subject to grading activities and possessed a high degree of disturbance (Figures 4 through 7). Based on the evidence presented during the field inspection, we recommend that this parcel has very low to no potential for historic or archaeological resources to be present. Therefore, no further survey is recommended.

On behalf of Tennessee, PAL looks forward to further consultation with the Abenaki Nation of New Hampshire regarding the Concord Lateral Expansion Project. If you have questions about the Project or concerns regarding any areas located along or near currently proposed Project

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facilities that may hold religious or cultural significance, please do not hesitate to contact Dianna L. Doucette, RPA, Principal Investigator, or me at your convenience.

Sincerely,

Gregory R. Dubell, RPA
Energy Projects Manager

/dg

Enclosure

cc: John Zimmer, ENSR (w/o encl.)

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Public
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April 4, 2008

Chief Nelson Bolding
Boldwing Clan
357 Tirrell Hill Road
Goffstown, New Hampshire 03045

Re: Tennessee Gas Pipeline Company
Concord Lateral Expansion Project, Pelham and Concord, NH
FERC Docket #CP08-65-000; PAL #2090

Dear Chief Bolding:

Tennessee Gas Pipeline Company (Tennessee) is proposing to modify existing piping at the Laconia Meter Station in Concord, New Hampshire (Figures 1 and 2) as part of the Concord Expansion Project. The Public Archaeology Laboratory, Inc. (PAL) has been in correspondence with the Boldwing Clan since October 2007 regarding this Project. This request specifically addresses the Laconia Meter Station and associated additional temporary workspace, not identified in previous correspondence.

The proposed modifications to the existing meter station are to process the additional gas volume generated by the Concord Compressor Station. In support of the modifications associated with the Laconia Meter Station, Tennessee will require additional space to utilize as a staging area for equipment and materials associated with the Project (Figure 3). Tennessee does not anticipate the need to clear additional areas which may presently be vegetated and peripheral to the existing facility.

PAL staff have reviewed Project materials and visited the proposed site to assess the potential for historic and archaeological resources to be present within the area of potential effect (APE). During the walkover inspection, the site was noted to have previously been subject to grading activities and possessed a high degree of disturbance (Figures 4 through 7). Based on the evidence presented during the field inspection, we recommend that this parcel has very low to no potential for historic or archaeological resources to be present. Therefore, no further survey is recommended.

On behalf of Tennessee, PAL looks forward to further consultation with the Boldwing Clan regarding the Concord Lateral Expansion Project. If you have questions about the Project or

concerns regarding any areas located along or near currently proposed Project facilities that may hold religious or cultural significance, please do not hesitate to contact Dianna L. Doucette, RPA, Principal Investigator, or me at your convenience.

Sincerely,

Gregory R. Dubell, RPA
Energy Projects Manager

/dg

Enclosure

cc: John Zimmer, ENSR (w/o encl.)

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April 4, 2008

Paul Pouliot
Council Chief and Speaker
Cowasuck Band – Pennacook-Abenaki People
COWASS North America, Inc.
P.O. Box 54
Foresdale, Massachusetts 02644

Re: Tennessee Gas Pipeline Company
Concord Lateral Expansion Project, Pelham and Concord, NH
FERC Docket #CP08-65-000; PAL #2090

Dear Chief Pouliot:

Tennessee Gas Pipeline Company (Tennessee) is proposing to modify existing piping at the Laconia Meter Station in Concord, New Hampshire (Figures 1 and 2) as part of the Concord Expansion Project. The Public Archaeology Laboratory, Inc. (PAL) has been in correspondence with the Cowasuck Band – Pennacook-Abenaki People since October 2007 regarding this Project. This request specifically addresses the Laconia Meter Station and associated additional temporary workspace, not identified in previous correspondence.

The proposed modifications to the existing meter station are to process the additional gas volume generated by the Concord Compressor Station. In support of the modifications associated with the Laconia Meter Station, Tennessee will require additional space to utilize as a staging area for equipment and materials associated with the Project (Figure 3). Tennessee does not anticipate the need to clear additional areas which may presently be vegetated and peripheral to the existing facility.

PAL staff have reviewed Project materials and visited the proposed site to assess the potential for historic and archaeological resources to be present within the area of potential effect (APE). During the walkover inspection, the site was noted to have previously been subject to grading activities and possessed a high degree of disturbance (Figures 4 through 7). Based on the evidence presented during the field inspection, we recommend that this parcel has very low to no potential for historic or archaeological resources to be present. Therefore, no further survey is recommended.

On behalf of Tennessee, PAL looks forward to further consultation with the Cowasuck Band – Pennacook-Abenaki People regarding the Concord Lateral Expansion Project. If you have

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questions about the Project or concerns regarding any areas located along or near currently proposed Project facilities that may hold religious or cultural significance, please do not hesitate to contact Dianna L. Doucette, Principal Investigator, or me at your convenience.

Sincerely,

Gregory R. Dubell, RPA
Energy Projects Manager

/dg

Enclosure

cc: John Zimmer, ENSR (w/o encl.)

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April 4, 2008

Chief Peter Newell
New Hampshire Intertribal Native American Council
17 Walnut Street
Laconia, New Hampshire 03246

Re: Tennessee Gas Pipeline Company
Concord Lateral Expansion Project, Pelham and Concord, NH
FERC Docket #CP08-65-000; PAL #2090

Dear Chief Newell:

Tennessee Gas Pipeline Company (Tennessee) is proposing to modify existing piping at the Laconia Meter Station in Concord, New Hampshire (Figures 1 and 2) as part of the Concord Expansion Project. The Public Archaeology Laboratory, Inc. (PAL) has been in correspondence with the New Hampshire Intertribal Native American Council since October 2007 regarding this Project. This request specifically addresses the Laconia Meter Station and associated additional temporary workspace, not identified in previous correspondence.

The proposed modifications to the existing meter station are to process the additional gas volume generated by the Concord Compressor Station. In support of the modifications associated with the Laconia Meter Station, Tennessee will require additional space to utilize as a staging area for equipment and materials associated with the Project (Figure 3). Tennessee does not anticipate the need to clear additional areas which may presently be vegetated and peripheral to the existing facility.

PAL staff have reviewed Project materials and visited the proposed site to assess the potential for historic and archaeological resources to be present within the area of potential effect (APE). During the walkover inspection, the site was noted to have previously been subject to grading activities and possessed a high degree of disturbance (Figures 4 through 7). Based on the evidence presented during the field inspection, we recommend that this parcel has very low to no potential for historic or archaeological resources to be present. Therefore, no further survey is recommended.

On behalf of Tennessee, PAL looks forward to further consultation with the New Hampshire Intertribal Native American Council regarding the Concord Lateral Expansion Project. If you have questions about the Project or concerns regarding any areas located along or near currently

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proposed Project facilities that may hold religious or cultural significance, please do not hesitate to contact Dianna L. Doucette, Principal Investigator, or me at your convenience.

Sincerely,

Gregory R. Dubell, RPA
Energy Projects Manager

/dg

Enclosure

cc: John Zimmer, ENSR (w/o encl.)

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April 4, 2008

Chief April St. Francis-Rushlow
Sovereign Abenaki Nation of Missisquoi
St. Francis/Sokoki Band
P.O. Box 276
100 Grand Avenue
Swanton, Vermont 05488

Re: Tennessee Gas Pipeline Company
Concord Lateral Expansion Project, Pelham and Concord, NH
FERC Docket #CP08-65-000; PAL #2090

Dear Chief St. Francis-Rushlow:

Tennessee Gas Pipeline Company (Tennessee) is proposing to modify existing piping at the Laconia Meter Station in Concord, New Hampshire (Figures 1 and 2) as part of the Concord Expansion Project. The Public Archaeology Laboratory, Inc. (PAL) has been in correspondence with the St. Francis/Sokoki Band of the Sovereign Abenaki Nation of Missisquoi since October 2007 regarding this Project. This request specifically addresses the Laconia Meter Station and associated additional temporary workspace, not identified in previous correspondence.

The proposed modifications to the existing meter station are to process the additional gas volume generated by the Concord Compressor Station. In support of the modifications associated with the Laconia Meter Station, Tennessee will require additional space to utilize as a staging area for equipment and materials associated with the Project (Figure 3). Tennessee does not anticipate the need to clear additional areas which may presently be vegetated and peripheral to the existing facility.

PAL staff have reviewed Project materials and visited the proposed site to assess the potential for historic and archaeological resources to be present within the area of potential effect (APE). During the walkover inspection, the site was noted to have previously been subject to grading activities and possessed a high degree of disturbance (Figures 4 through 7). Based on the evidence presented during the field inspection, we recommend that this parcel has very low to no potential for historic or archaeological resources to be present. Therefore, no further survey is recommended.

On behalf of Tennessee, PAL looks forward to further consultation with the St. Francis/Sokoki Band of the Sovereign Abenaki Nation of Missisquoi regarding the Concord Lateral Expansion Project. If you have questions about the Project or concerns regarding any areas located along

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or near currently proposed Project facilities that may hold religious or cultural significance, please do not hesitate to contact Dianna L. Doucette, Principal Investigator, or me at your convenience.

Sincerely,

Gregory R. Dubell, RPA
Energy Projects Manager

/dg

Enclosure

cc: John Zimmer, ENSR (w/o encl.)

Public Archaeology Laboratory
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Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 13:

Please revise the *Procedures Guiding the Discovery of Unanticipated Cultural Resources and Human Remains* (Attachment 4C of Volume II and Appendix C of Volume II) as follows. Provide the revised plan to the FERC and the SHPO. Provide any SHPO comments on the revised plan.

a. In "Artifact Discoveries": delete item 2; revise the first sentence of item 3 to "The Tennessee Environmental Affairs Department or the Tennessee chief inspector will in turn notify Tennessee's cultural resource management consultants."; in item 5, insert ", emailed," after "faxed" in line 4, and; renumber the section.
b. In "Human Remains Discoveries", update the section to reflect the Advisory Council on Historic Preservation's new policy (February 23, 2007) on human remains. In item 4, revise the beginning of the first sentence to "Tennessee will consult with the FERC, the SHPO, the property owner," continue with the remainder of the sentence. In line 4, place a period after "excavated", delete the remainder of the sentence, and replace it with "Tennessee would prepare a treatment plan in consultation with the FERC and the SHPO." Delete the following sentence (starting "This MOA..."). Continue with the remainder of the paragraph (starting "Analyses...").
c. Update the FERC contact address to Office of Energy Projects, 888 First Street, NE, and the FERC contact to Laurie Boros, Archaeologist, Division of Gas-Environment and Engineering, phone (202) 502-8046, fax (202) 208-0353.

Data Response No. 13:

The *Procedures Guiding the Discovery of Unanticipated Cultural Resources and Human Remains* (Attachment 4C of Volume II and Appendix C of Volume II) have been revised to take into consideration comments recommended by the FERC. An updated version (attached) was submitted to the SHPO on April 3, 2008. Tennessee will supplement its filing with any additional comments by the SHPO on the revised plan, if received.

Respondent: Howdy McCracken
Title: Principal Environmental Representative

Procedures Guiding the Discovery of Unanticipated Cultural Resources and Human Remains

Tennessee Gas Pipeline
an El Paso company

Concord Lateral Expansion Project,
Pelham and Concord, New Hampshire.

April 2008

Submitted by:
The Public Archaeology Laboratory, Inc.
210 Lonsdale Ave
Pawtucket, RI 02860

Introduction

Tennessee Gas Pipeline Company (Tennessee), a subsidiary of El Paso Corporation, is committed to the protection and preservation of cultural resources, in accordance with federal and state legislation, and is continuing that commitment as part of the proposed Concord Expansion project. Tennessee recognizes that despite intensive cultural resource field investigations that are typically performed prior to project construction, or a determination that a particular area exhibits low archaeological sensitivity, it is nonetheless possible that cultural resource deposits could be discovered during project construction or maintenance activities, particularly during excavation. Tennessee also recognizes the requirement for compliance with federal and state regulations and guidelines regarding the treatment of human remains, if any are discovered.

As such, the procedures guiding the unanticipated discovery of cultural resources and human remains detailed herein were developed on behalf of Tennessee and in consultation with the New Hampshire Division of Historical Resources/State Historic Preservation Office (NH DHR/SHPO). They represent the basis of the approach that Tennessee will use to address emergency discoveries of archaeological cultural resources during construction activities within the Concord Expansion project area of potential effect.

The purpose of archaeological surveys during the planning of pipeline projects is to determine the presence and disposition of historic and prehistoric cultural resources within the project area. These archaeological investigations are conducted in accordance with standards set forth in the Federal Energy Regulatory Commission (FERC) Office of Pipeline Regulation's *Guidelines for Reporting on Cultural Resources Investigations* (2002), pursuant to 18 CFR 157.206 and Appendix II of Subpart F, which require actions taken under sections 3 and 7 of the Natural Gas Act (Part 380, Appendix A) to comply with the National Environmental Policy Act of 1969 (NEPA) and Section 106 of the National Historic Preservation Act of 1966 (16 USC 470f), as amended (1976, 1980, 1992, 1999) implementing the regulations of the Advisory Council on Historic Preservation (36 CFR 800). All work is undertaken pursuant to the *Secretary of the Interior Standards for Archaeology and Historic Preservation* (48 Federal Regulations 44716-42

[1983]) and the applicable laws and regulations pertaining to the identification, preservation, and protection of cultural resources of New Hampshire.

Notification Procedures

During Construction

Tennessee is committed to the protection and preservation of cultural resources, in accordance with federal and state legislation. Tennessee recognizes that – despite the intensive cultural resource field investigations that are typically performed prior to project construction – it is nonetheless possible that previously unknown cultural resource sites could be discovered during the project construction process, particularly during excavation activities. Tennessee recognizes the requirement for strict compliance with federal and state regulations and guidelines regarding the treatment of human remains, if any are discovered. The following details the plan that will be followed in the event that new cultural resource sites or human remains are discovered during the construction process.

Artifact Discoveries

The following procedures will be adhered to in the event of a potential discovery of artifacts during construction.

1. Possible artifacts may be discovered by Tennessee or contractor construction personnel. In the event that suspected artifacts are uncovered during a construction activity, that activity shall immediately be halted until it can be determined whether that materials are cultural and, if so, whether they represent a potentially significant site.

   If artifacts are identified by contractor construction personnel, activities that could affect the integrity of the cultural materials will be suspended immediately and the contractor's construction foreman will be notified immediately. The foreman, in turn, will notify Tennessee chief inspector. Notification will include the specific construction area (e.g., trench wall, spoil pile, foundation excavation) in which the potential site is located.

   If artifacts are identified by Tennessee personnel, they will direct the contractor to stop work on activities that could affect the integrity of the resource, and will inform Tennessee's Environmental Affairs Department.

2. If the artifacts are discovered in an area in which no sites are recorded, the Tennessee Environmental Affairs Department or the Tennessee chief inspector will in turn notify Tennessee's cultural resource management consultants. An archaeologist then will be called to review the material. On-site Tennessee personnel will discuss with the archaeologist the location and type of artifacts. If the archaeologist is not in the immediate site vicinity and further work in the excavation area is not imminent, then photographs or drawings of the artifacts may be faxed to the archaeologist for review.

   Based on the information provided, the archaeologist will determine if a visit to the area is required and, if so, is expected to have crews on-site within 24 hours after notification.

If on-site archaeological investigations are required, the Tennessee chief inspector will inform the construction contractor. No construction work at the site that could affect the artifacts will be performed until the archaeologists review the site. The site will be flagged as being off-limits for work, but will not be identified as an archaeological site *per se* in order to protect the resources.

3. The archaeologists will conduct a review of the site and will test the site as necessary. Since the area will have already been partially disturbed by construction activities, the objective of any cultural resource investigations will be to recover data quickly so that construction at the site can continue in a timely manner.

4. The archaeologists will determine, based on the artifacts found and on the cultural sensitivity of the area in general, whether the site is potentially significant and whether the FERC and State Historic Preservation Officer (SHPO) require immediate notification by telephone. If not, data regarding the site will be faxed, emailed, or sent by express mail to the FERC and SHPO in order to ensure a quick site clearance.

5. Tennessee and its archaeologists will work with the FERC and SHPO to ensure that the site is cleared in as timely a fashion as possible.

Human Remains Discoveries

If any human remains are to be encountered, they will likely be discovered in excavations, possibly below areas tested by standard survey techniques.

The treatment of any human remains encountered during Tennessee projects will be guided by the policy statement adopted by the Advisory Council on Historic Preservation ([Advisory Council]; see *Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects*, Advisory Council February 23, 2007), and by the relevant state laws and guidelines. The Advisory Council policy statement recommends that, when burial sites, human remains, or funerary objects will be or are likely to be encountered in the course of Section 106 review, a federal agency should adhere to the following principles:

Principle 1: Participants in the Section 106 process should treat all burial sites, human remains, and funerary objects with dignity and respect.

Principle 2: Only through consultation, which is the early and meaningful exchange of information, can a federal agency make an informed and defensible decision about the treatment of burial sites, human remains, and funerary objects.

Principle 3: Native Americans are descendants of original occupants of this country. Accordingly, in making decisions, federal agencies should be informed by and utilize the special expertise of Indian tribes and Native Hawaiian organizations in the documentation and treatment of their ancestors.

Principle 4: Burial sites, human remains, and funerary objects should not be knowingly disturbed unless absolutely necessary, and only after the federal agency has consulted and fully considered avoidance of impact and whether it is feasible to preserve them in place.

Principle 5: When human remains or funerary objects must be disinterred, they should be removed carefully, respectfully, and in a manner developed in consultation.

Principle 6: The federal agency is ultimately responsible for making decisions regarding avoidance of impact to or treatment of burial sites, human remains, and funerary objects. In reaching its decisions, the federal agency must comply with applicable federal, tribal, state, or local laws.

Principle 7: Through consultation, federal agencies should develop and implement plans for the treatment of burial sites, human remains, and funerary objects that may be inadvertently discovered.

Principle 8: In cases where the disposition of human remains and funerary objects is not legally prescribed, federal agencies should proceed following a hierarchy that begins with the rights of lineal descendants, and if none, then the descendant community, which may include Indian tribes and Native Hawaiian organizations.

The procedures that will be followed in the event that human remains are discovered during construction of Tennessee projects are as follows:

1. If any personnel on the construction site identify human remains, all construction work in the immediate vicinity of the site that could affect the integrity of the remains will cease immediately. The remains should not be touched, moved, or further disturbed.

2. Tennessee project manager will be informed immediately and notified of the exact location of the remains, as well as of the time of discovery, and in turn will be responsible for immediately contacting Tennessee's archaeological consultant.

3. The archaeologist and Tennessee will be responsible for notifying appropriate FERC personnel as well as the SHPO, the Chief Medical Examiner and the State Police.

4. Tennessee will consult with the FERC, the SHPO, the property owner, and the appropriate Native American group if the remains are Native American, to discuss whether there are prudent and feasible alternatives to protect the remains. The results of this consultation will be made in writing. If it is not possible to protect the remains, they may be excavated. Tennessee would prepare a treatment plan in consultation with the FERC and SHPO. Analyses to be performed on Native American remains will be discussed in consultation with the appropriate Native American representatives. After analyses, Native American remains will be returned to the appropriate Native American group for disposition.

5. In all cases, due care will be taken in the excavation and subsequent transport and storage of the remains to ensure that the sacred meaning of the remains for Native Americans are respected and protected, as required.

Applicable State Laws

New Hampshire General Laws, RSA 227-C:1-17; RSA 227-C:8a-g; RSA 289; RSA 290; RSA 635.

List of Contacts

Federal Energy Regulatory Commission
Office of Pipeline Regulation
825 N. Capitol Street, N.E.
Washington, DC 20426
Contact: Laurie Boros, Archaeologist
Division of Gas-Environment and Engineering
Tel: (202) 502-8046
Fax: (202) 208-0353

New Hampshire State Historic Preservation Office
New Hampshire Division of Historical Resources
19 Pillsbury Street, 2nd Floor
Concord, New Hampshire 03301
Contact: Edna Feighner, Archaeologist and Review and Compliance Coordinator
Tel: (603) 271-2813
Fax: (603) 271-3433

New Hampshire Chief Medical Examiner
246 Pleasant Street, Suite 218
Concord, New Hampshire 03301
Contact: Dr. Thomas Andrew, Chief Medical Examiner
Tel: (603) 271-1235
Fax: (603) 271-6308

New Hampshire Intertribal Native American Council
17 Walnut Street
Laconia, New Hampshire 03246
Contact: Peter Newell, Council Chief
Tel: (603)524-1982

New Hampshire State Police
Headquarters
33 Hazen Drive
Concord, New Hampshire 03305
Contact: Tel: (603) 271-3636
Fax: (603) 271-1153

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 14:

For construction of the compressor station and meter facility, provide quantified construction emission estimates by type of emission source (e.g., trenching equipment, pile driving equipment, bulldozers/graders, welding machines, drilling equipment, trucks, etc.), the duration, and the emissions associated with each activity in tons per calendar year of construction within the ozone nonattainment area. If the General Conformity threshold under 40 CFR 93.153 is exceeded in any calendar year, provide an analysis identifying all mitigation to demonstrate compliance with the requirements of General Conformity under the Clean Air Act and submit detailed information documenting how the project would demonstrate conformance with the applicable New Hampshire state implementation plan in accordance with 40 CFR 93.158.

Data Response No. 14:

Compressor Station 270B1 is located on the southeastern side of Hillsborough County with the northern property line of the site abutting Rockingham County. With respect to National Ambient Air Quality Standards (NAAQS), the current air quality designations of both Hillsborough and Rockingham counties are "attainment" or "unclassifiable" for all pollutants except ozone. Both the southeastern side of Hillsborough County and the southern portion of Rockingham County are classified as "Moderate" ozone non-attainment areas under Subpart 2 of Title I, Part D, of the Clean Air Act with respect to the eight-hour ozone NAAQS.[1] Under 40 CFR §93.153(b)(1), the pollutants requiring a review for ozone non-attainment areas, such as Hillborough and Rockingham counties, are VOC and NOx. The *de minimis* emissions levels as defined by the General Conformity Regulations are defined as follows:

	Tons/year
Ozone (VOCs or NO_X):	
Serious non-attainment areas (NAAs)	50
Severe NAAs	25
Extreme NAAs	10
Other ozone NAAs outside an ozone transport region	100
Other ozone NAAs inside an ozone transport region:	
VOC	50
NO_X	100

1 On March 27, 2008, EPA published in the Federal Register the new eight-hour ozone NAAQS of 0.075ppm. Because the counties are currently designated as non-attainment under the previous NAAQS of 0.08 ppm, it would also be in non-attainment with the newly promulgated NAAQS.

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Carbon monoxide: All NAAs	100
SO_2 or NO_2: All NAAs	100
PM–10:	
Moderate NAAs	100
Serious NAAs	70
$PM_{2.5}$:	
Direct emissions	100
SO_2	100
NO_X(unless determined not to be a significant precursor)	100
VOC or ammonia (if determined to be significant precursors)	100
Pb: All NAAs	25

The emissions associated with the Project would entail particulate fugitive emissions from excavation activities and transportation vehicles, as well as combustion emissions from the operation of various non-road or mobile equipment. The emissions factors are from EPA published AP-42 data or, where appropriate, from NONROAD2005 modeling results conducted on such equipment for construction activities at a sister facility. Details of the emissions calculations are included herein. A summary is provided below. The summary reflects the Project to be in conformity with the respective *de minimis* levels.

Compressor Station

Activity	Total Project Emissions (tons)					
	NOx	VOC	CO	SO_2	PM_{10}	$PM_{2.5}$
Fugitive Dust						
Site grading, excavation, and filling					26.57	26.57
Paved Roads (commuter and delivery vehicles)					3.81	0.53
Unpaved Roads (commuter and delivery vehicles)					2.34	0.23
Exhaust						
Commuter Vehicles	0.21	0.28	3.11	0.00	0.01	0.00
Light Duty Vehicles (including delivery vehicles)	0.01	0.01	0.01	0.00	0.00	0.00
Construction Equipment	12.10	0.86	23.40	1.15	0.74	0.74
Total Project Emissions	**12.32**	**1.15**	**26.52**	**1.16**	**33.46**	**28.07**
Conformity *de minimis* (tpy)	100	100	–	–	–	–
Total Emissions below *de minimis*? (Yes/No)	Yes	Yes	–	–	–	–

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Laconia Meter Station

Activity	Total Project Emissions (tons)					
	NOx	VOC	CO	SO_2	PM_{10}	$PM_{2.5}$
Fugitive Dust						
Site grading, excavation, and filling					5.25	5.25
Paved Roads (commuter and delivery vehicles)					0.05	0.01
Unpaved Roads (commuter and delivery vehicles)					0.03	0.00
Exhaust						
Commuter Vehicles	0.10	0.14	1.54	0.00	0.00	0.00
Light Duty Vehicles (including delivery vehicles)	0.04	0.03	0.06	0.00	0.00	0.00
Construction Equipment	0.19	0.01	0.89	0.02	0.01	0.01
Total Project Emissions	0.34	0.18	2.48	0.02	5.34	5.28
Conformity *de minimis* (tpy)	100	100	--	--	--	--
Total Emissions below *de minimis*? (Yes/No)	Yes	Yes	--	--	--	--

Respondent: Trinh Tran
Title: Principal Engineer

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 15:

Provide the emission rate of NOx, VOC, CO, SO2, PM10, and PM2.5 from all of emission generating equipment at the proposed meter station, expressed in tons per year for maximum operating conditions. Include supporting calculations, emission factors, fuel consumption rates, and annual hours of operation.

Data Response No. 15:

There will not be any new permanent stationary emissions sources as a result of the Project at the Laconia Meter Station. Emissions associated with construction activities are provided in Data Response No. 14.

Respondent: Trinh Tran
Title: Principal Engineer

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 16:

Resource Report 9 does not address fugitive dust emissions from construction. Please identify any procedures which would be used to mitigate fugitive dust emissions.

Data Response No. 16:

The majority of air emissions produced during construction activities will be particulate matter (PM10 and PM2.5) in the form of fugitive dust. Fugitive dust will result from land clearing, grading, excavation, concrete work, and vehicle traffic on paved and unpaved roads. The amount of dust generated would be a function of construction activities, soil type, moisture content, wind speed, frequency of precipitation, vehicle traffic, vehicle types, and roadway characteristics. Emissions would be greater during dry periods and in areas of fine-textured soils subject to surface activity. NHDES regulates fugitive dust control within the plant property under Env-A-2805, which requires owners and operators to control the emissions of dust from vehicular movements within the plant property. Dust control methods include paving or wetting roadways. Tennessee will employ proven construction practices to control fugitive dust emissions during construction. All areas disturbed by construction will be stabilized; therefore, fugitive dust emissions during construction would be minor, of short duration, and insignificant.

Respondent: Trinh Tran
Title: Principal Engineer

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 17:

Provide the greenhouse gas emissions (CO2, N20, and methane) expressed in carbon dioxide equivalents from the facilities (compressor station and meter station) and in tons per year for maximum operating conditions. Include the leakage rate of methane from the compressor station and pipeline operation in tons per year, including an estimate from venting/blowdowns.

Data Response No. 17:

Emissions estimates provided below are based on operating data provided in the air permit application for the Project and Tennessee's similar facility. Details of emissions estimate are attached herein, and a copy of the air permit application is enclosed as Attachment C.

Compressor Station

	CO2 (ton)	CH4 (ton)	N2O (ton)	CO2e (tonne)
Combustion	32,987	0.04	0.04	29,937
Fugitive	1	44		922
Vented	0	180		3,748
Total	**32,989**	**224**	**0.04**	**34,607**

Laconia Meter Station

There will not be any permanent stationary emissions sources at the meter station as a result of the Project; therefore, there will not be any GHG emissions associated with the meter station.

Respondent: Trinh Tran
Title: Principal Engineer

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 18:

Estimate the noise impacts at the closest noise-sensitive areas resulting from full station and unit blowdowns from the proposed compressor station.

Data Response No. 18:

A blowdown silencer will be installed at Compressor Station 270B1. It will be designed and installed to meet the requirements of all applicable noise regulations.

Respondent: Charlie Malcolm
Title: Principal Engineer

Tennessee Gas Pipeline Company
Concord Lateral Expansion Project
Docket No. CP08-65-000
March 28, 2008

Data Request No. 19:

Due to the large numbers (180+) residents within ½ mile of the compressor station, indicate what mitigation measures Tennessee would implement to reduce noise impacts from the compressor station below currently predicted levels.

Data Response No. 19:

Considering the low population density and industrial nature of the area, Tennessee is taking more than reasonable steps to address noise concerns. The currently predicted levels in Resource Report 9 take into account many proactive and voluntary mitigation measures by Tennessee to reduce the noise levels. Tennessee intends to install noise insulation panels in the compressor building, VFD motors on the gas coolers, compressor and generator exhaust mufflers, and pipe silencing (blankets or burying of pipe) in order to try to attain the predicted levels. Tennessee continues to explore additional measures for noise mitigation with its noise consultant, but has not identified any other reasonable measures that would provide additional mitigation at this time. Ultimately, given the inexact nature of noise modeling and prediction, Tennessee is only able to guarantee that it will meet the 55 dBA requirements.

Respondent: Charlie Malcolm
Title: Principal Engineer